

Public Utilities

fortnightly

SALUTING THE 34TH ANNUAL A. G. A. CONVENTION — OCTOBER 27-30



November 6, 1952



GAS INDUSTRY HIGHLIGHTS—
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Public Utilities

FORTNIGHTLY

VOLUME L

NOVEMBER 6, 1952

NUMBER 10

HENRY C. SPURR
 Editorial Consultant



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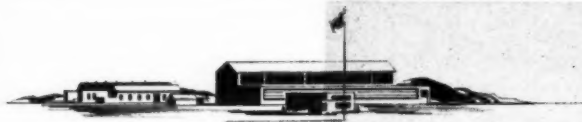
PUBLIC UTILITIES FORTNIGHTLY...
 stands for Federal and state regulation of both privately owned and operated utilities and publicly owned and operated utilities, on a fair and nondiscriminatory basis; for nondiscriminatory administration of laws; for equitable and nondiscriminatory taxation; and, in general—for the perpetuation of the free enterprise system. It is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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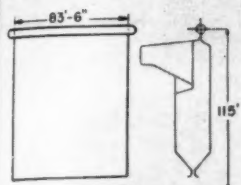
DIVIDED

A practical, long-proved solution to rising construction costs may be found in the B&W Divided-Furnace Boiler. Whether it is a problem of conserving height, width, or both—especially for units with large heat input—B&W's Divided-Furnace design offers remarkable economies. The sketches on the opposite page show typical savings in space for twin-furnace and triple-furnace construction as compared with single-furnace construction.

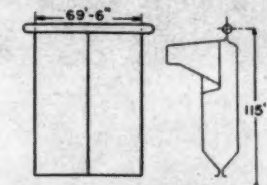
A furnace division wall receives heat from both sides and therefore must be assured an adequate

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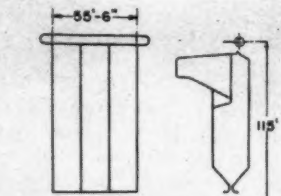
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SINGLE FURNACE

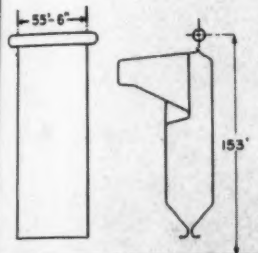


TWIN FURNACE

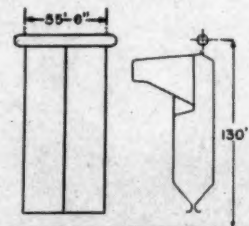


TRIPLE FURNACE

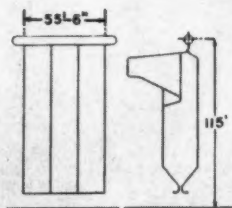
EFFECT OF DIVISION WALLS ON BOILER WIDTH—KEEPING HEIGHT CONSTANT



SINGLE FURNACE



TWIN FURNACE



TRIPLE FURNACE

EFFECT OF DIVISION WALLS ON BOILER HEIGHT—KEEPING WIDTH CONSTANT

D FURNACE

Division wall furnace construction is used in combination with other significant achievements of B&W Research and Development, including the Cyclone Furnace, Pressure-Firing, Gas Recirculation, and improved alloys for high steam temperatures. Widely accepted throughout the power industry, these modern B&W advances are making major contributions to more economical and reliable steam generation.

B&W's continuing program of progressive research combined with its broad experience in designing and building boilers with the highest capacities in existing pressure-temperature ranges, assure you of the most efficient and economical solutions to your specific steam generation problems.

ADVANTAGES OF DIVIDED FURNACE CONSTRUCTION

- Provides greater cooling area without increasing furnace volume
- Reduces steel and other material costs by keeping boiler and building volume to a minimum
- Lowers furnace construction costs
- Cuts operating costs by reducing slagging in furnace and in convection surface

Triple furnace boilers for 1 boiler — 1 turbine units of over 200,000 KW capacity are now being constructed



**BABCOCK
& WILCOX**

Pages with the Editors

As this issue goes to press, the members and guests of the American Gas Association are gathering for their thirty-fourth annual convention in Atlantic City, October 27th to 30th. They gather in a period of considerable uncertainty as to the exact future course to be followed by their great and expanding natural gas utility and pipeline industry. Momentous decisions—industrial, regulatory, economic, and political—appear to lie just “around the corner.”

FOLLOWING our annual custom, we have planned this issue to be of special interest to the gas utility people. We trust that our many readers and friends of the gas industry, as well as those of sister utility industries and the regulatory commissioners and others, will find in this issue selected features and other material which will help them in a better understanding and solution of some of these problems.

FOR our leading article, CHARLES E. BENNETT, president of the American Gas Association, has written a comprehensive story of gas industry progress over the past year. Mr. BENNETT is also president of The Manufacturers Light



LARRY SHOMAKER

NOV. 6, 1952



HOWARD B. NOYES

& Heat Company of Pittsburgh. An engineering graduate of the University of Wisconsin who entered utility service with the Madison (Wisconsin) Gas & Electric Company in 1915, he has been associated with Columbia Gas System companies in the East since 1920.

* * * *

HOWARD B. NOYES, Assistant Deputy Administrator for gas transmission and distribution operations of the Petroleum Administration for Defense, reviews the recent wartime and postwar history of gas industry progress. Mr. NOYES' article, entitled "Why a PAD Order No. 2—And How Long?" begins on page 673. Mr. NOYES is also vice president of the Washington Gas Light Company.

* * * *

LARRY SHOMAKER, vice president of Northern Natural Gas Company, whose article on FPC gas cost allocation begins on page 680, is another contributor to this issue, who graduated (PhB, '30) from the University of Wisconsin. He has been generally connected with the gas industry in the Middle West ever since joining his present organization in



What goes on at this Round Table?

• They could be exchanging ideas on new financing . . . discussing the cost of new money . . . hearing an expert appraisal of long-term trends for utilities.

Those present, in addition to the public utility executives, include experts from investment banking institutions, insurance companies, rating agencies—and from numerous other types of financial organizations.

Yes, this is a typical Public Utility

“Round Table” at the Irving. Last year alone, 146 representatives from 85 utility companies attended these sessions.

These “Round Tables,” now going into their sixth year, are one of the ways we seek to serve the public utility industry. As specialists in this field, we are constantly on the lookout for ways to be of practical help. If your company has an unusual problem, that’s the kind of challenge we welcome.

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ONE WALL STREET • NEW YORK 15, N. Y.

Capital Funds over \$120,000,000

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Public Utilities Department—TOM P. WALKER, *Vice President in Charge*

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

1930. In 1938 he was made industrial engineer, later specializing in sales and public relations.

* * * *

DALE PARKER, whose article on corporate stockholders begins on page 689, has been secretary of the Columbia Gas System since May, 1941. A graduate of Yale and Harvard Law School, Mr. PARKER served as lawyer and bankers' agent in New York, Buenos Aires, Rio de Janeiro, and London from 1919 to 1924. Prior to 1940, when he joined the Columbia Gas System, he was director of an international merchant banking house.

* * * *

JOSEPH D. PARENT, whose article on "Training Men for the Gas Industry" begins on page 696, is a Bostonian who graduated from Ohio State (PhD, '33) and taught there, as well as at Loyola of Chicago and Kansas State. He joined the Institute of Gas Technology in 1943, and is a leading authority and expert on gas industry technology.

* * * *

AN interesting article, entitled "The Gas Industry's Man-power Problems," begins on page 705. Its author is F. O. ROUSE, a native Virginian, who graduated from Kings College and the University of Tennessee (MA). His early career was in state government and the foreign petroleum industry.



F. O. ROUSE

NOV. 6, 1952



Fabian Bachrach

DALE PARKER

JOHAN J. HASSETT, formerly of the editorial staff of this magazine, has since been active in the public relations field in Washington, D. C., and New York city. Mr. HASSETT was born in Washington and is a graduate of near-by Georgetown University. He has been a staff member of the public information department of AGA. More recently and to date, he is in Washington as the director of public relations for Structural Clay Products Institute. Out of his experiences on both sides of the editorial desk he has written his estimate of the potentialities of a broad-ranged public relations program for the gas industry which begins on page 715.

* * * *

AMONG the important decisions pre-printed from *Public Utilities Reports* in the back of this number, may be found the following:

THE Kentucky commission rules upon methods of apportioning the production plant of a natural gas company furnishing interstate and intrastate service for the purpose of fixing intrastate rates. (See page 65.)

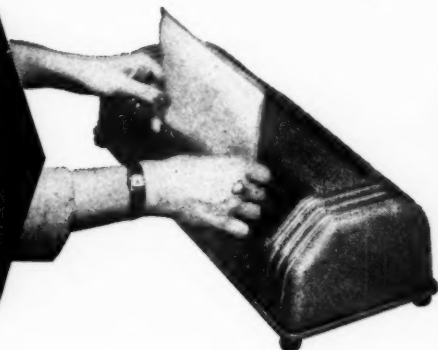
THE next number of this magazine will be out November 20th.



The Editors

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Coming IN THE NEXT ISSUE



IMPACT OF THE NORTHERN NATURAL GAS DECISION ON NATURAL GAS FINANCING

A careful account of the effect of an FPC decision upon investment in natural gas company securities. The commission's decision in the Northern Natural Gas Case has caused some concern in the industry over restrictive regulatory policies. In this, the first of two articles, Dr. Ralph E. Badger makes a diagnosis of the situation obtained as a result of the decision. In the second article, Dr. Badger will go into the possible corrective action which might be recommended. (The second article will appear in PUBLIC UTILITIES FORTNIGHTLY, December 4, 1952.)

PUBLIC RELATIONS PLANNING OF UTILITY MANAGEMENT

Government intervention in business may have reached its peak. Businessmen should encourage the new President to give business enterprise greater encouragement. Sound public relations programs have, and can continue to have, salutary effects in producing a social climate in which business can keep on producing and increasing the standard of living for all. These points are brought out by the author, Donald D. Hoover, in an article showing clear insight into these still "uncertain" times.

NEW YORK IS DIFFERENT

The generalized customer relations programs established for utilities in other sections of this great country may be adapted to many of its regions, but not New York city. Its problems are unique. Normal methods do not always apply. The cliff dweller, as he is sometimes called, does not have room for all the load-promoting appliances. How New York is different is told in this unusual article by A. Bryan Marvin of Consolidated Edison Company of New York.

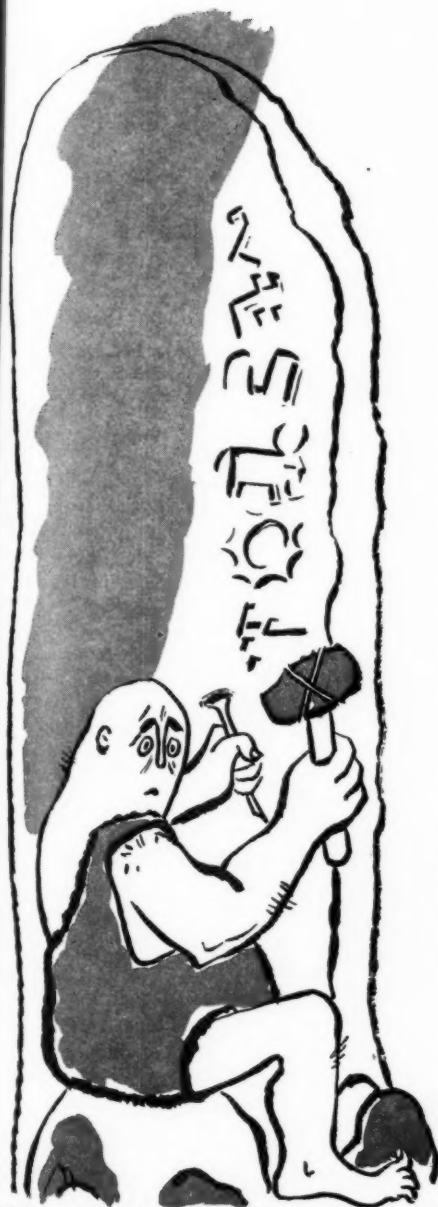
A CUSTOM-MADE COMMUNICATIONS SERVICE FOR OTHER UTILITIES

A minor controversy over the past year regarding the connection of a far-flung industry communications system with regular telephone circuits brought to light a new custom-made communications service. This has been fashioned by the telephone industry (Bell system) out of microwave and other radio circuits along with conventional communication tools. Gas pipelines and electric power networks as well as railroads are among the primary customers for this new service. Russell King, Bell system technical expert, tells about its development and usage to date.



Also . . . *Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.*

There's a faster way!



Our Cro-Magnon friend, who had lots of time on his hands, didn't worry too much about getting work done faster, or at lower cost.

For you—things are different!

Because of today's high cost of doing business, you cannot afford to overlook any opportunity for cutting costs.

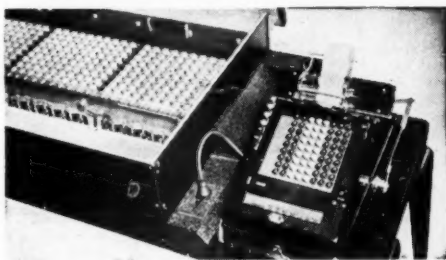
Specifically, we have in mind the *efficient* method of compiling bill analyses.

Our one-step method of bill analysis does away with the necessity for temporarily acquiring, training and supervising a large clerical force. Our experienced staff plus our specially designed Bill Frequency Analyzer machines can turn out the job in a few days at a cost that is often $\frac{1}{2}$ the expense of having the work done in your own offices.

We think you will find the booklet, "The One Step Method of Bill Analysis" most interesting. Send for it today.

P.S. If you use punched cards for billing, we are also equipped to make your analyses from them.

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New York 13, N. Y.

Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE

DONALD E. WOODWARD
*Vice president, Mutual Life
Insurance Company.*

"In the scramble of everyone to get some more, we have degraded our money."

ARTHUR MEIGHEN
Former Premier of Canada.

"We forget that the only true security is in risk, the only true stability is in change, and the only true certainty is the cheerful acceptance of uncertainty."

LAURENCE F. LEE
*President, Chamber of Commerce
of the United States.*

"The great error of the century, not alone in America, but almost world-wide, is the false idea that some unknown someone else picks up the check for government subsidies and doles."

CHARLES M. WHITE
*President, Republic Steel
Corporation.*

"I am fed up with seeing my country governed by little men with little minds, and principles to match. I do not want it governed by men whose only rules of government are those of rule by deal, by deficit, by deceit, by crony, and corruption."

D. A. HULCY
President, Lone Star Gas Company.

"If we're being edged toward Socialism—and I am thoroughly convinced that we are—then it is time to say so without any 'ifs, buts, or ands' about it, and without any of these mealy-mouthed arguments that go along halfway with a socialistic scheme and then excuse themselves with a recitation of what it looks like 'on the other hand.'"

JOSEPH EARL PERRY
*President, Newton (Massachusetts)
Savings Bank.*

"If every Federal function which competes with private enterprise were to make fairly competitive charges for services rendered or commodities sold; if grants, subsidies, and special privileges should more generally be made self-liquidating, these increased revenues alone might retire the public debt, stimulate private enterprise, and permit reduction in taxation."

REESE H. TAYLOR
*President, Union Oil Company of
California.*

"I do not believe it is necessary to emphasize what a tax burden of 38 per cent will do to our productivity. The sources of private risk capital already are drying up at the present tax rates. The incentives for more and better production are disappearing. When the incentives and the capital are gone, there is but one answer left: bigger government—first more government control and eventually government ownership."

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The offering is made only by the Prospectus.*

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October 9, 1952

\$60,000,000

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Dated October 1, 1952

Due October 1, 1972

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REMARKABLE REMARKS—(Continued)

HARRY FLOOD BYRD
U. S. Senator from Virginia.

"There is literally nothing more important than the preservation of the fiscal and moral integrity of the United States and the freedoms on which our Republic was founded."

GWILYM A. PRICE
President, Westinghouse Electric Corporation.

"If, by enlarging their understanding of free enterprise, we can convince employees that the broad objectives of labor and management are the same, then we will have gone a long way toward industrial harmony and a greater productive effort."

BENJAMIN F. FAIRLESS
President, United States Steel Corporation.

"To put our faith in price controls while we continue to inflate our money supply is a good deal like plugging up the safety valve on a steam boiler, and then piling on more fuel. Something, somewhere, is just naturally bound to go bust sometime."

CRAWFORD H. GREENEWALT
President, E. I. du Pont de Nemours & Company.

"If we are to have a strong and productive industry in time of war, we must have a strong and productive industry in time of peace. . . . Therefore, any action which hampers, retards, and weakens American industry, also hampers, retards, and weakens our peace, our progress, and our defense."

HERBERT HOOVER
Former President of the United States.

"The outstanding phenomenon in the United States is the dangerous overstraining of our economy by our gigantic expenditures. The American people have not yet felt the full impact of the gigantic increase in government spending and taxes. Yet we already suffer from the blight of inflation and confiscatory taxes."

EDITORIAL STATEMENT
Knoxville Journal.

"If you're going to have the Federal government, or state government, or any other government in the public power business, then by all odds it would be better to have the principle of 'home rule' operative in the undertaking. Home-managed state Socialism is preferable to state Socialism operated from Washington, even in our books, and we yield to nobody in our objection to Socialism wherever found."

*Excerpt from annual report,
Richfield Oil Corporation.*

"The trend of [tax] rates is ever upward. Unless it is stopped, there will be no earnings, after taxes, to put back into the business, and no industrial growth for private enterprise in any line of endeavor either by corporations or by individuals. On the other hand, if the economic climate is kept such that earnings are available to finance additional productivity, industry will go ever forward, building the strength of this nation, toward invincibility from without and toward prosperity from within."

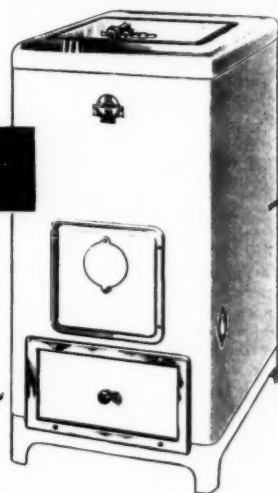
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the automatic gas garbage disposal unit

...makes friends for
the gas utilities

...builds continuous
base load

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CALCINATOR

VALLEY WELDING & BOILER CO.

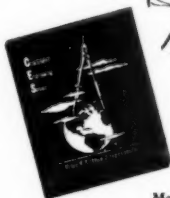
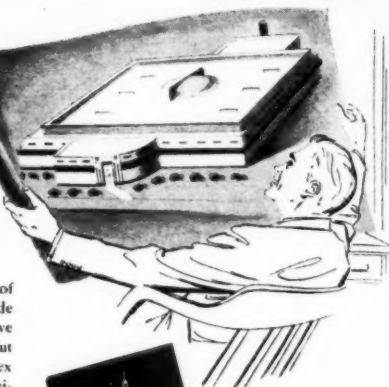
Bay City, Michigan

Thinking Progressively

*Industry Plans for
Tomorrow's Needs*

Management while concerned with today's problems thinks also of modernization programs, new plant designs, expansions, etc., to provide for the anticipated needs of tomorrow. Such projects may involve everything from analysis of requirements to final operating tests. But whatever their size or scope, to coordinate and perform these complex functions the experience and skill of the independent consulting engineering organization is invaluable. These smoothly functioning organizations provide the pooled skill and broad experience so essential in the elimination of costly trial and error waste, delays, and disappointments.

The Peter F. Loftus Corporation has been rendering such service to utilities, industrials, institutions, and governmental agencies for many years.



Many of these projects are illustrated in our new booklet "Co-ordinated Engineering Services."

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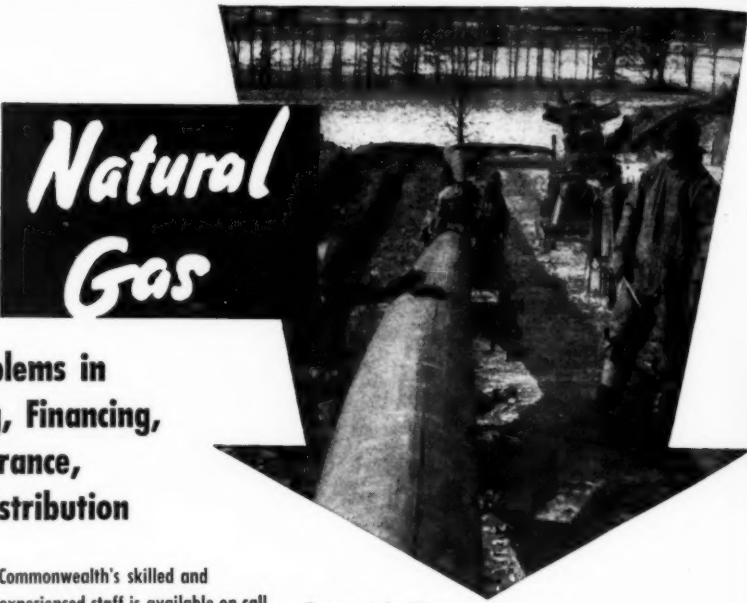
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to keep pace with the times.*

—THOMAS JEFFERSON



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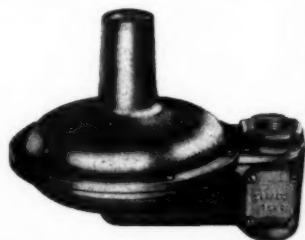


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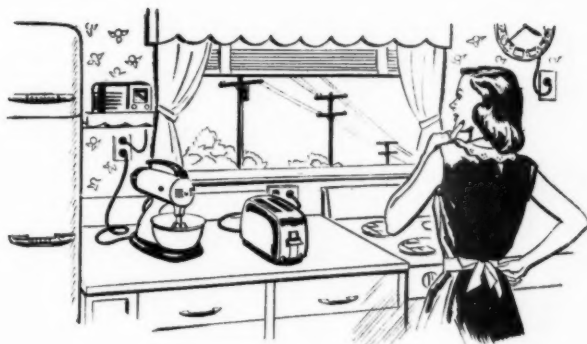
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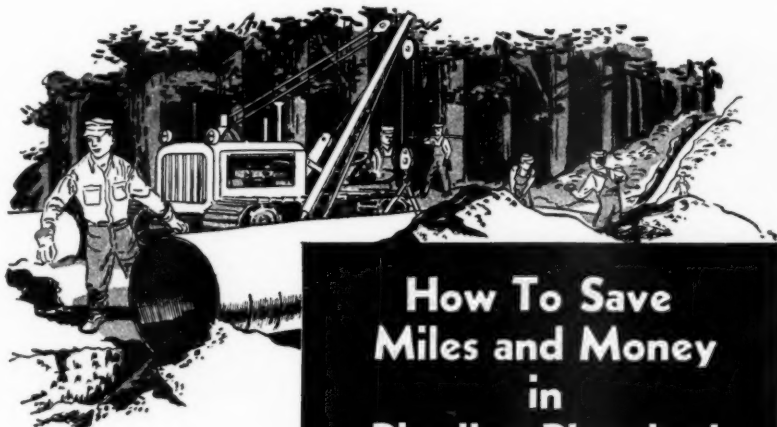
We extend our hearty welcome to those attending the 34th annual convention of the American Gas Association at Atlantic City. We are proud to be a part of AGA and to participate in the growth of the GAS industry.

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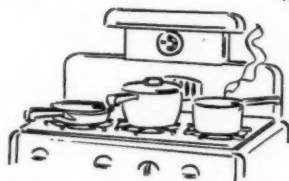
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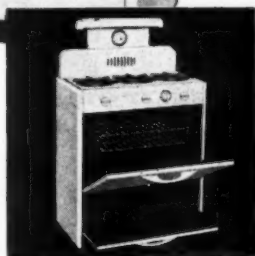
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69 BWR

Here is the ideal family-size range for small apartments. Big-range features—three top burners, 20-inch oven, smokeless broiler—are compacted into an attractive range that requires only 16 3/4" x 27 1/2" of floor space.

Sell the Vernois 69BWR to apartment owners, managers and tenants. There'll be more home cooking—more gas consumed—when you make this new Vernois model available to your apartment customers.

If you will write your name in the margin of this page and attach it to your letterhead, we will send you full details about the Vernois 69BWR. It will pay you!



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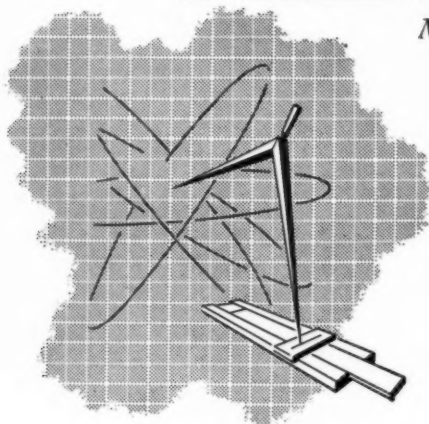
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to **A.G.A.**
from the
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HELPING BUILD THE GREAT SOUTHWEST

C. H. ZACHRY, President

Headquarters: DALLAS, TEXAS

THINGS ARE HAPPENING in Gas Control

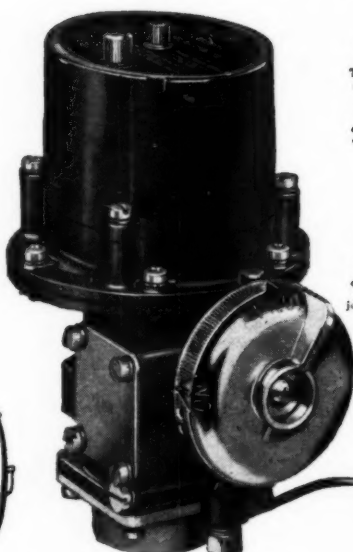


Completely Silent

No annoying operating sounds. Minimizes flame ignition and extinction noises. Positive action . . . without hums, clicks or bangs!

Instantly Convertible

Basic, manual control, with 2 kits available for conversion to automatic operation. Quickly convertible for thermostatic operation . . . in the plant or in the field.



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Temperature modulates in 2 stages from high to low . . . back to high, if necessary, to maintain steady, even heat. Practically eliminates "cold 70."



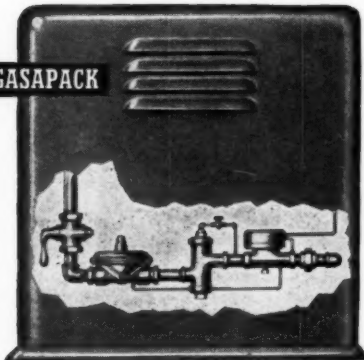
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One-unit installation replaces four or five controls, with all their connections and pipe joints. Simple to install; easy to service.



See the difference . . . in simplicity . . . in space-saving

Before GASAPACK



With GASAPACK



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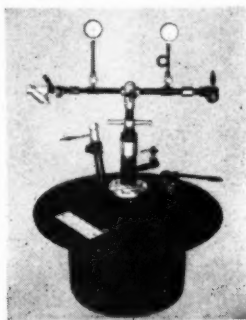
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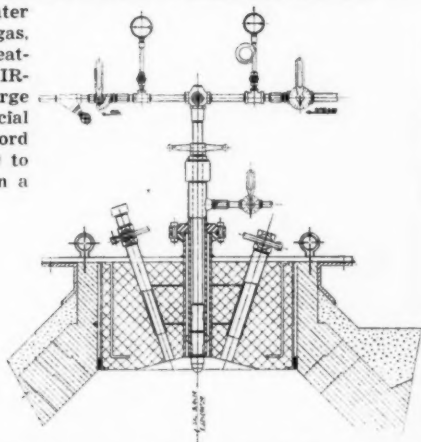
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To facilitate the conversion of carburetted water gas plants to the production of high BTU oilgas, NATIONAL AIROIL has developed a special heating unit. This unit utilizes the NATIONAL AIROIL heavy-duty S-A-L (Steam Atomizing, large capacity) burner. The unit, in the form of a special cylinder, fits into the top of the generator to afford quick, easy and efficient production of a 1,000 to 1,050 BTU oilgas. Write for "Making Oilgas in a Water Gas Plant."



This cut shows our special "S-A-L" oil burner assembly installed in the coal charging hole at top of generator. Write for information.



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Peak Shaving!

WITH these changing times—and changing BTU's—it is well to consider the advantages inherent in new production processes.

Natural gas, if it enters your plant and distribution system, can and will continue to be of great benefit. Then your first important consideration will be standby facilities. There are Gasmaco oil gas processes and other Gasmaco methods for this purpose.

Then, too, you will need equipment for peak shaving. The history of conversion to natural gas and natural gas expansion has been one of phenomenal growth—but with an ever increasing load factor. Transmission line capacity is rapidly used up. These and other factors lead to PEAK SHAVING. The solution: Gasmaco Equipment.

OUR processes can be adapted to your existing water gas sets. Many different arrangements are possible, dependent upon factors of cost and usage. In other cases, complete new construction can be justified.

Any gas as an alternate should match natural gas in burning characteristics. To accomplish this the process must be flexible, efficient. Methods by Gasmaco are characterized by quick start-up, low oil consumption, good quality by-product tar and production of gas free of lamp black. Our processes have the flexibility and control to tailor-make an oil gas with the desired performance. Light, medium, or heavy high carbon oils can be used.

THE gas should be properly conditioned—cooled by modern Gasmaco scrubbers, then oil scrubbed and purified. In many cases, light oil recovery is justified, and profitable. All of this plant equipment and auxiliaries can be obtained from The Gas Machinery Company who has devoted fifty years to the service of your industry.

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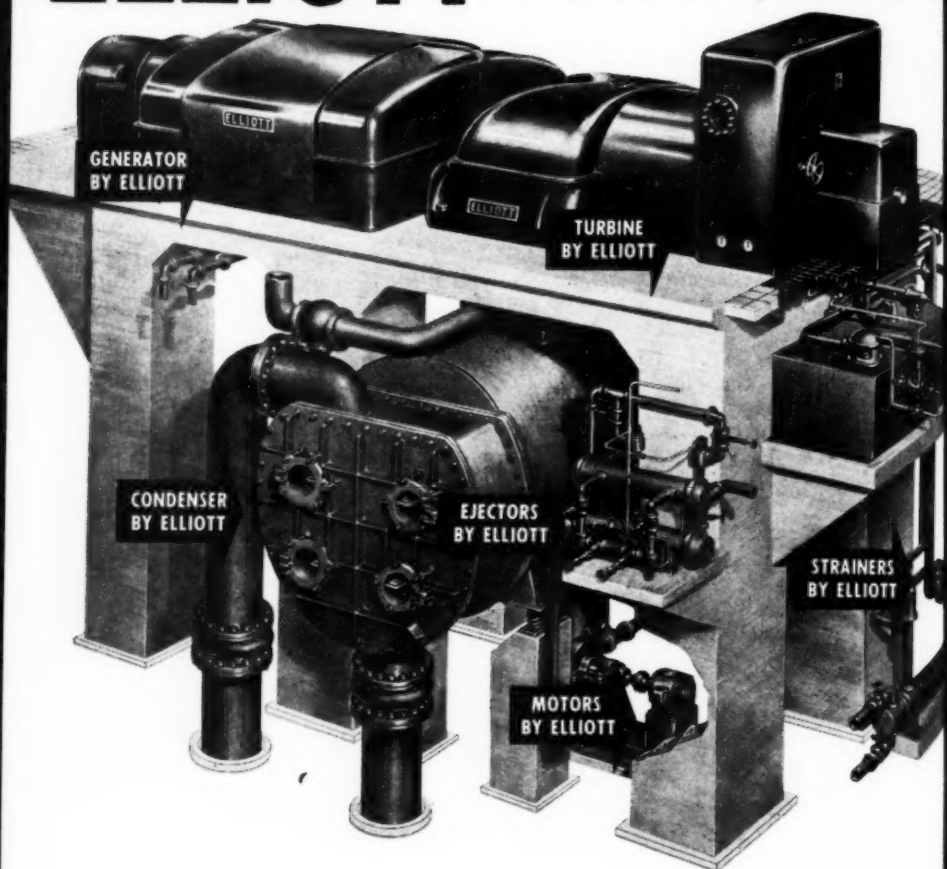
low-cost gas and electricity have helped people live more comfortably, produce more efficiently.

During the years to come, too, Californians can rely on P. G. and E. services doing even more of their work...and bringing them even more comforts and conveniences at bargain rates.

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When the major elements in a power generation system bear the trade mark of a single builder of dependable reputation, the functioning of individual units may confidently be expected to achieve the highest standards of performance. Elliott-built equipment, as shown above, is mated to attain the utmost in overall operating economy.

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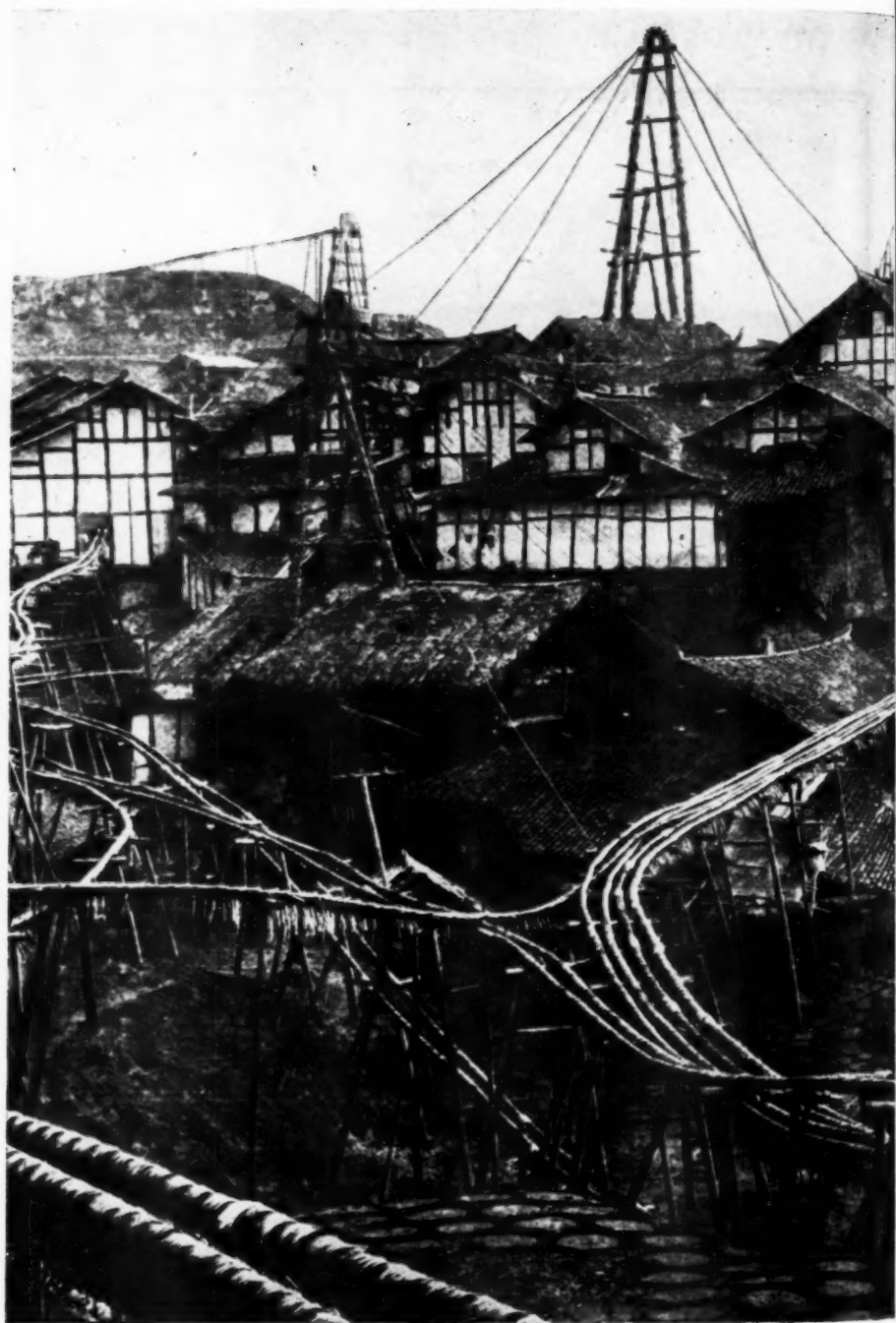
Utilities Almanack



NOVEMBER



6	T ^a	[¶] <i>Pennsylvania Electric Association, Communications Committee, begins meeting, Syracuse, N. Y., 1952.</i>	
7	F	[¶] <i>Virginia Independent Telephone Association ends 2-day annual convention, Roanoke, Va., 1952.</i>	
8	S ^a	[¶] <i>Mid-Southeastern Gas Association will hold meeting, Raleigh, N. C., Nov. 20, 21, 1952.</i>	
9	S	[¶] <i>Southern California Meter Association will hold instrument maintenance course, Los Angeles Harbor Jr. College, Cal., Nov. 20-22, 1952.</i>	Ⓒ
10	M	[¶] <i>National Association of Railroad and Utilities Commissioners begins annual meeting, Little Rock, Ark., 1952.</i>	
11	T ^a	[¶] <i>Alabama-Mississippi Independent Telephone Association ends 2-day annual convention, Montgomery, Ala., 1952.</i>	
12	W	[¶] <i>National Reclamation Association begins annual convention, Long Beach, Cal., 1952.</i>	
13	T ^a	[¶] <i>Pennsylvania Electric Asso., Relay Committee, begins meeting, Newark, N. J., 1952.</i> [¶] <i>National Electrical Manufacturers Asso. ends meeting, Atlantic City, N. J., 1952.</i>	
14	F	[¶] <i>South Dakota Telephone Association ends 2-day annual convention, Sioux Falls, S. D., 1952.</i>	
15	S ^a	[¶] <i>American Society of Mechanical Engineers will hold meeting, New York, N. Y., Nov. 30-Dec. 5, 1952.</i>	
16	S	[¶] <i>American Water Works Association, Alabama-Mississippi and Florida sections, and Florida Sewage & Industrial Waste Asso. begin joint meeting, Pensacola, Fla., 1952.</i>	
17	M	[¶] <i>Edison Electric Institute, Industrial Relations Committee, begins annual fall round-table conference, St. Louis, Mo., 1952.</i>	Ⓒ
18	T ^a	[¶] <i>American Institute of Electrical Engineers ends 2-day special technical conference on recording and controlling instruments, Philadelphia, Pa., 1952.</i>	
19	W	[¶] <i>American Standards Association begins annual meeting, New York, N. Y., 1952.</i> [¶] <i>New England Gas Association begins safety conference, Boston, Mass., 1952.</i>	



*Courtesy, Gas Appliance Manufacturers Association
Photo by H. K. Richardson, engineer*

Centuries-old Natural Gas Pipelines

*These short-distance bamboo pipelines still supply gas to brine evaporators
in Szechwan Province, China.*

Public Utilities

FORTNIGHTLY

VOL. L, No. 10



November 6, 1952

Natural Gas Growth Carries Gas Industry to New Heights

Facing multiple complications growing out of the defense emergency, the progress of the gas industry is clearly demonstrated by its current record of expansion. Temporary obstacles, such as steel shortage, are regarded as challenges rather than barriers, as will be seen in this inspiring message.

By CHARLES E. BENNETT*

PRESIDENT, AMERICAN GAS ASSOCIATION

SPURRED on by the ever-increasing demand for natural gas services, the gas industry again will achieve new records in 1952. Conservative estimates indicate the gas utilities will be serving nearly 26,000,000 customers at the year end, a gain of about 5 per cent over the record-high level reached last year. Revenues from the sale of gas will approach the \$2.5 billion mark and the volume of

gas sold to ultimate customers will be more than 50 billion therms. If sales of gas to other utilities for resale are included in the statistics, total revenues for the gas industry this year will be more than \$3,250,000,000. Customers served with LP-gas number more than 6,000,000 in addition to those served with city gas.

As stated above, the tremendous expansion of the natural gas branch of the industry still continues. Today there are more than 18,000,000 cus-

*For additional personal note, see "Pages with the Editors."

PUBLIC UTILITIES FORTNIGHTLY

tomers being served with natural gas, representing more than 71 per cent of total industry gas customers. Nearly 48 billion therms of natural gas will be sold in 1952, and revenues from natural gas sales should total nearly \$2 billion.

THIS important expansion in natural gas service has necessitated a huge construction program for the entire gas industry. The bureau of statistics recently estimated that the nation's gas distribution and pipeline industry will spend about \$5.6 billion for construction of new facilities and expansion of present plant in the 5-year period extending from 1952 through 1956. Of this total more than \$5 billion will be devoted to expanding the natural gas branch of the industry.

Shortages of steel and other materials have retarded the growth of the nation's transmission and distribution systems somewhat in 1952. It is expected that about \$1,170,000,000 will be spent on natural gas construction in 1952 as compared with an all-time high of \$1,461,500,000 spent in 1951. However, barring some drastic change in the nation's economy, it is believed that construction expenditures for the gas industry in 1953 will again climb to a new record of more than \$1,681,000,000.

The Federal Power Commission authorized construction of nearly 5,800 miles of natural gas pipeline in 1951 and about 5,000 additional miles may be authorized by the end of 1952. Applications for approximately 13,500 miles have been approved or are pending before the commission to date. The nation's natural gas pipeline system,

including gathering, transmission, and distribution lines, totals more than 342,500 miles today.

OUR supply of natural gas continues more than ample to meet this great and growing demand. The AGA Committee on Natural Gas Reserves estimated that at the end of 1951 proved recoverable reserves of natural gas were almost 194 trillion cubic feet. This represented a gain of 8.2 trillion cubic feet over the reserves at the end of 1950, despite a record production of more than 8 trillion cubic feet during 1950. These estimates include only proved recoverable reserves. Some experts have estimated that there are more than 500 trillion cubic feet of natural gas reserves in this country. Present fields are being expanded constantly, while new production and drilling methods are bringing in additional natural gas in fields believed to be depleted or nearly dry.

The demand for gas house heating still exceeds the industry's ability to serve in some areas, with no indications of any slackening. The gas industry added 1,514,000 new gas house-heating customers in the 1951-52 heating season and it is estimated that the 1952-53 season will bring an additional 1,014,000 customers for gas house heating. According to figures submitted to the AGA Bureau of Statistics more than 1,000,000 new gas house-heating customers can be expected in each of the 1953-54 and 1954-55 heating seasons.

The gas industry's Promotion, Advertising, and Research (PAR) Plan will complete its eighth year of operation at the end of 1952. Contributions by member companies of approximate-

GROWTH CARRIES GAS INDUSTRY TO NEW HEIGHTS



Future Gas Sales Prospects

"SPURRED on by the ever-increasing demand for natural gas services, the gas industry again will achieve new records in 1952. Conservative estimates indicate the gas utilities will be serving nearly 26,000,000 customers at the year end, a gain of about 5 per cent over the record-high level reached last year. Revenues from the sale of gas will approach the \$2.5 billion mark and the volume of gas sold to ultimate customers will be more than 50 billion therms."

ly \$2,000,000 in 1952 brought the total for eight years to more than \$14,000,000.

ASTRONG indication of the faith of the gas utility companies in the future of their industry is seen in the increase of the PAR fund from about \$1,650,000 in 1951 to more than \$2,000,000 in the current year. Approximately 50 per cent of this fund goes for national advertising to bring the story of the supremacy of gas and gas appliances to millions of readers of prospective users of gas services. This advertising is augmented by magazine, newspaper, radio, and television advertising, as well as direct mail efforts on the part of the gas utilities, gas appliance manufacturers, and dealers.

Special promotional efforts spearheaded by AGA, such as the Spring

Style Show, Old Stove Roundup, and other campaigns, have been successful this year in overcoming the lethargic effect of the buyers' market which existed earlier this year in most durable goods industries. The entire gas industry united behind these drives and it is certain that very creditable figures in sales of gas appliances will be shown at the end of 1952.

More than \$700,000 has been allocated this year for research projects designed to improve the production, distribution, and utilization of gas. A considerable part of this fund is devoted to projects destined to improve appliance designs and functions. Natural gas projects are meriting a larger share of research funds.

Natural gas now is being distributed in quantities in the metropolitan New York area and is reaching New England in increasing

PUBLIC UTILITIES FORTNIGHTLY

quantities. There are 39 states now receiving natural gas, with the Pacific Northwest remaining as the only major area in the country not served by natural gas pipelines. Applications are pending before the FPC for the construction of at least one major line from the Southwest to bring natural gas to the Pacific northwestern states. Also there is a possibility of tapping the new natural gas fields of Canada as a source for new lines to bring natural gas to this area.

REGULATORY bodies have become more aware of the need on the part of many gas utility companies for increased rates. However, there still is considerable delay in obtaining action on rate petitions. On July 1, 1952, there were outstanding before the Federal Power Commission, applications for a total of \$150,000,000 in increased natural gas rates. This figure includes some duplication on the part of transmission and distribution companies, but is substantially accurate.

Since that date about \$14,000,000 in rate applications has been disapproved, leaving about \$136,000,000 pending. The Federal Power Commission has suspended petitions for \$81,000,000 of this amount, until these applications can be acted upon. Another \$35,000,000 in proposed rate increases have become effective, but under bond, and about \$20,000,000 remained with no disposition having been made.

STILL, despite the lag in regulatory relief, needed to meet the rising costs of gas utility operations, the financial future of the gas industry remains favorable. This is substantiated by the fact that the gas industry expects to obtain about 44 per cent of the money it needs for its 5-year construction program through long-term financing, and about 20 per cent through the sale of common and preferred stock issues, and 36 per cent from internal sources. This means that more than \$3.5 billion will be invested in the gas industry in the next five years.

Haven't Resigned from the Human Race

"WE have not resigned from the human race. Neither science nor technology nor all the deterministic doctrine inspired by them, nor the despotisms that have tried to force that doctrine upon mankind, have succeeded in producing a world that can function without our individual powers of reason, imagination, and conscience. . . . There is no dialectical or technological substitute for the creative individual. . . .

"This is also the truth that the founders of this Republic perceived and Jefferson proclaimed when he said that morality, compassion, and generosity were innate elements of the human constitution, capable of cultivation in individuals, and capable of transmission to society through individuals."

—A. WHITNEY GRISWOLD,
President, Yale University.



Why a PAD Order No. 2— And How Long?

The most controversial emergency regulation by the Petroleum Administration for Defense—as far as gas companies are concerned—is the so-called PAD Order No. 2. This limits the number of new space-heating customers that can be attached in some service areas. This article explains the reasons for the order, how it is working, and how long it may be expected to remain in force.

By HOWARD B. NOYES*

ASSISTANT DEPUTY ADMINISTRATOR, PETROLEUM ADMINISTRATION FOR DEFENSE

IT is sometimes difficult to recall it now, but only two decades ago, with the nation in the grip of economic paralysis, the gas industry seemed to be struggling for survival. There were dour comments, particularly in some financial circles, about a probable lingering death, something like the passing of the carriage industry with the introduction of automobiles. More modern and efficient ways of heat utilization and changing competitive fuel price relationships would, many said, eventually stifle the industry.

If the prophets of doom had talked only of the manufactured gas industry trend, they might have had at least a small point. In 1932, 8,476,000

customers were served with manufactured gas, more than half of the nation's total of 15,532,000 manufactured, natural, and mixed gas customers. But the manufactured gas business was barely holding its own.

The natural gas business, on the other hand, went on expanding rapidly even during the depression years. The bulk of the natural gas market, however, was relatively close to the major gas production areas in the Appalachian, southwest, and California regions.

It is true that natural gas had just been brought to the western Great Lakes region through several pipelines originating in the Hugoton and Panhandle fields of Kansas, Oklahoma, and western Texas. Upon completion of those lines, though, construction of

*For additional personal note, see "Pages with the Editors."

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long-distance natural gas transmission lines came almost to a standstill. Economic conditions were such that they did not justify new building, and there was little demand for natural gas in areas then served by manufactured gas.

WITH World War II came a change. Extraordinary demand by industry for gas to be used in war production coupled with rapid depletion of the Appalachian gas fields necessitated construction of a natural gas transmission line from Texas to West Virginia during the war. And once the war had ended, the Big Inch and Little Big Inch pipelines, built originally to transport crude oil and products from Texas to the northeastern Atlantic seaboard, were converted by the company that bought them to the transportation of natural gas. From 1941 to 1945 annual natural gas sales had increased from 16,358,000,000 therms to 22,563,000,000 therms, a rise of almost 40 per cent in a 4-year period.

Many had thought war's end might bring an appreciable slackening in the demand for gas. It didn't. When price ceilings were removed, the prices of the competitive fuels immediately went up. Gas, which previously had been a premium-priced fuel for many purposes, now became a relatively low-cost fuel. Almost instantly there was a huge demand for gas, particularly for home heating and industrial purposes.

The end of the war thus witnessed the advent of a basic change in the character of the gas business—the ascendancy of natural gas as the major gaseous fuel throughout almost the

entire country. The increased operating and capital costs of manufactured gas caused many manufactured gas companies to convert either to straight natural gas distribution or to the use of natural gas for mixing and reforming purposes. By the end of 1951 the number of customers using manufactured gas had dropped to 5,804,000, or less than 25 per cent of the national total of gas customers.

DURING the 6-year period 1945 to 1951 major long-distance gas transmission pipelines were constructed from the great southwest producing areas to the large industrial centers in the North and also to California. Gas pipeline construction reached its peak in 1950 and 1951, in each of which over 1,700,000 tons of large lines (16 inches and larger) were installed. Still the demand for natural gas exceeded the capacity of the transmission lines.

The Federal government had controlled the increased use of natural gas during the war years in order to insure maximum amounts of gas for war industries. In the postwar period many gas companies, particularly in the northeast quadrant of the country, were forced to ask local state regulatory bodies for similar controls. The availability of service, particularly to new space-heating customers, had to be restricted because the demands for such service were far beyond the capacities of the existing transmission lines. Despite the many drastic state controls, however, natural gas sales in the six years following the end of the war in 1945 increased 100 per cent.

The invasion of South Korea in June, 1950, posed new problems.

WHY A PAD ORDER NO. 2—AND HOW LONG?

UPON enactment of the Defense Production Act of 1950, the President created a number of government defense agencies to help him carry out the objectives of this act—the mobilization of the vast manpower and material resources of the United States against the threat of foreign aggression. The responsibility for mobilization of the gas and oil industries was delegated to the Petroleum Administration for Defense. PAD's rôle with respect to the gas industry is a double one: (1) It acts as claimant agency for the industry in obtaining and allocating critical materials needed for the expansion of the industry. (2) It must assure that an adequate gas supply is available for defense purposes and for essential civilian use at the time and at the place such gas supply is needed. Neither job has been an easy one in the face of constantly rising demands for gas.

In the days since the Korean invasion the gas industry has required large quantities of pipe for the construction of long-distance transmission lines. But large steel pipe takes plate steel, and there has been an abnormal demand for plate from the military, the atomic energy program, and many essential defense industries. Tanks, ships, railroad equipment, tankers, barges, oil refineries, and oil

storage and transportation—all need plate, and so all are in direct competition with the unabated requirements of the gas industry for pipe.

IN 1952 the tonnage of large steel pipe (16 inches and larger) allocated to the gas industry will amount to approximately 700,000 tons as against the 1,700,000 tons used in 1951. This decrease in the amount of pipe available does not mean a corresponding reduction in the expansion of the natural gas industry. In fact the 1952 allocation has substantially supplied all the pipe requirements submitted to PAD by transmission companies. Construction has been slowed in 1952 because, among other reasons, pipeline operators in some cases have had difficulty in getting additional reserves of natural gas for transport. The supply of gas has been expanded by such methods as the installation of substantial blocks of compression power on a number of existing pipeline systems to bring them up to their economic transmission capacity.

Even with the expansion, though, supplies are not sufficient to satisfy full unrestricted demand, and they have not been for a long time now. When the gas division of PAD was organized in early 1951, it was immediately confronted with this prob-



Q "THE end of the war . . . witnessed the advent of a basic change in the character of the gas business—the ascendancy of natural gas as the major gaseous fuel throughout almost the entire country. The increased operating and capital costs of manufactured gas caused many manufactured gas companies to convert either to straight natural gas distribution or to the use of natural gas for mixing and reforming purposes."

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lem. During severe cold spells in the winter of 1950-51 many important defense industries, particularly in the Appalachian area, had been forced to shut down for a number of days because the supply—even with peak-shaving and the use of industrial stand-bys—was not equal to the total requirements. It was up to PAD to see that there was no repetition of this situation with its dislocation in the production of essential defense materials and the attendant unemployment.

IN the early summer of 1951 it became gravely doubtful that sufficient steel pipe would be available for completion of some long-distance natural gas transmission pipelines on which work either had begun or was scheduled to begin shortly. Particularly in the Appalachian area, then, it seemed probable that if demand were not somehow restricted, so great a load would be thrown on the supply-short gas utilities that service not only to essential defense industry but also to some household customers would have to be interrupted on the winter peak days.

After careful analysis of this problem and full discussions of it with the Gas Industry Advisory Council, representatives of the Federal Power Commission and state regulatory commissions, and appliance manufacturers and dealers, PAD issued Order No. 2.

This order restricted the addition of large-volume customers and new space-heating installations in 15 states and the District of Columbia, all located in the northeastern part of the country. Since the order became

effective, August 22, 1951, eight state commissions have availed themselves of the privilege extended by the Bow Amendment to the Defense Production Act to remove themselves from its limitation provisions by certifying to the President that they are restricting the use of natural gas to the extent necessary to accomplish the objectives of the act. The limitation provisions of the order—amended since it was first issued—are now effective only in those parts of Michigan served with gas supplied wholly or partly by the Michigan-Wisconsin Pipe Line Company and in Connecticut, Delaware, the District of Columbia, Massachusetts, New Jersey, New York, and Rhode Island.

IN general the natural gas industry met no major difficulties in supplying customers during the winter of 1951-52. The weather contributed substantially to this situation in that the coldest weather in the East last winter came on a December week end, when a substantial block of industrial load was off the lines and Appalachian underground storage reserves were practically at a peak. Credit for alleviating what otherwise might have been a serious gas shortage must also be given the industry. The pipeline companies through almost heroic efforts expedited completion of some badly needed transmission pipelines, and a number of operating companies entered into temporary exchange arrangements that let them put more gas in underground storage than previously had been thought possible. But the restrictions of PAD Order No. 2—and of various state regulations—played their part, too, in getting the

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Importance of the Regulatory Attitude

"SOLUTION of the industry's problems requires a co-operative and understanding attitude on the part of Federal agencies, the state regulatory bodies, the natural gas producers, the pipeline companies, and the distributing utilities. New approaches to the problem of bringing supply and demand into early balance must be found if the industry is to meet its basic obligation as a public utility to render adequate service to all its customers."

defense industries and other gas users through the winter.

In retrospect it can be said that a primary salutary effect of PAD Order No. 2 was a sharpening of the awareness by the state commissions, the gas companies, and the gas customers of the fact that the problem of natural gas supply is not purely of local or state character but has attained regional and national proportions. The provocative discussion that attended the issuance of the order could not fail to have this result.

IT is a basic PAD policy not to continue any agency order or directive beyond the point at which it is required by the defense mobilization program. In line with that policy PAD staff members discussed with the Gas Industry Advisory Council in March, 1952, the questions of continuance of

the order, its possible modification or revocation. Following that meeting a special committee of the council appointed to study the problem recommended (1) that the order be kept in effect, (2) that it be rescinded as early as conditions permit, and (3) that certain provisions of the order be liberalized.

THE future status of Order No. 2 was also discussed at a meeting of representatives of the state regulatory commissions in the Appalachian and New England areas, including those that had certified under the Bow Amendment. The majority of these commissions, too, concluded that the basic provisions of the order should be left substantially intact.

Consequently, on August 22, 1952, PAD issued its amended Order No. 2, liberalizing some provisions in

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recognition of the increased supply of natural gas available to the area in which the limitations of the order apply.

PAD Order No. 2 provides for modification of its limitation phases for any gas companies that can demonstrate they have an adequate supply of gas available to serve proposed new large-volume or space-heating loads. Since early 1952, PAD has not denied any requests for modification to enable a gas company to meet its expected load growth or to extend space-heating service to the number of new customers specified by the company in its application. This situation does not mean that PAD is administering the order loosely. It simply reflects the fact that the natural gas supply in many areas has greatly improved; the applicant company in every case has been able to demonstrate its ability to handle the new loads.

IT is the intention of PAD to rescind this order just as soon as it becomes apparent that the order makes no substantial contribution to the gas industry's ability to serve the defense mobilization program.

That statement does not mean that the order will be retained until gas supply is in full balance with gas demand. There were natural gas shortages that necessitated state and local restrictive orders even before PAD was set up in business. Undoubtedly such shortages will continue for some time, making necessary a continued control on the growth of the market in certain areas. But the PAD restriction order is not an instrument to relieve regulatory agencies and gas companies of their normal responsibilities

and obligations. That order takes its justification from defense demands, and from defense demands alone.

There are many problems facing the natural gas industry in its efforts to meet the ever-growing requirements of its customers—how to get additional gas reserves, how to get pipe for transmission lines, how to finance a large number of projects, what may be the actions of regulatory commissions on rate and certificate cases. These problems are extremely complex and not subject to easy solution. In any consideration of the subject, though, one factor should remain paramount: There is still a large potential demand for gas service in many areas that has not been met by the industry, and that demand must be satisfied.

STUDIES have recently been made by PAD of estimates of future demand furnished by about 200 gas companies whose sales comprise over 90 per cent of the nation's total. According to those estimates, the potential natural gas sales in 1955 will be 40 per cent above sales in 1951.

On the recommendation of PAD the Defense Production Administration has approved a gas utility industry expansion goal for 1953 to permit at least a start in meeting this increasing demand. The goal calls for the laying in 1953 of 7,200 miles of large pipe (16 inches and larger) and 17,700 miles of small pipe. The 7,200 miles of large pipe are considered equivalent to approximately 1,500,000 tons of steel. Thus if the industry is able to obtain required materials and can successfully resolve all other project difficulties, the 1953 construc-

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tion of new transmission lines would almost equal that of the peak years of 1950 and 1951.

MUCH more than materials is involved in the necessary expansion, however. Solution of the industry's problems requires a co-operative and understanding attitude on the part

of Federal agencies, the state regulatory bodies, the natural gas producers, the pipeline companies, and the distributing utilities. New approaches to the problem of bringing supply and demand into early balance must be found if the industry is to meet its basic obligation as a public utility to render adequate service to all its customers.

Natural Gas Pipelines (See Frontispiece)— 3,000 Years Ago and Today

TRANSMISSION of natural gas through pipelines isn't as new as one might suppose. Nearly 3,000 years ago the Chinese drilled gas wells to depths of several thousand feet, using bamboo drill pipe and hand-wrought iron drilling bits. The problem of transmitting the gas was solved by piping it through hollow bamboo rods. The centuries-old short-distance bamboo pipelines, pictured in the frontispiece, still convey gas to brine evaporators where it is used as fuel in dehydrating the brine and making salt.

Although the history of natural gas as a servant of mankind dates back so far, it is only within the past few years that long-distance, big-diameter gas transmission lines have become a reality. These lines are a far cry from the ancient bamboo tubes. Rather than short stretches of painstakingly fitted lengths of dried vegetation laid on wooden framework and looking like overgrown fishing poles, giant steel arteries are today's carriers of gas which is transported thousands of miles to delivery points.

Heavy-gauge pipe, up to 34 inches in diameter, is used in constructing modern transmission lines which can handle pressures of more than 800 pounds per square inch with ample safety margins. Technical advances such as new welding techniques, coating and wrapping operations, and rigid inspection of welds by X-ray are utilized in assembling sections of pipe into complete stretches. Unlike the Chinese salt makers' network of bamboo lines, through which gas flows in comparatively small volume from near-by wells, our nation's long-distance transmission lines must deliver billions of cubic feet of natural gas to supply increasing demands of household and industrial consumers.

Most of today's pipelines are laid underground, and an observer looking for outcroppings of Texas Eastern's transmission lines would see very little of them. His views of the big pipes would be confined mostly to compressor station sites. Wherever the lines appear, however, one is impressed by the massiveness of the pipelines which carry natural gas from the Southwest to eastern delivery points, visible testimony of the spectacular development of gas transmission during the past few years.

—From spring, 1952, edition of "The Inch," published by Texas Eastern Transmission Corporation.



Is FPC Gas Cost Allocation Equitable?

Should a pipeline company's interruptible consumers bear a substantial portion of the cost of fixed charges incurred in serving firm customers? Peculiarities of pipeline allocation have been the subject of recent FPC decision discussed in this article.

By LARRY SHOMAKER*

VICE PRESIDENT, NORTHERN NATURAL GAS COMPANY

SHOULD the Federal Power Commission substitute "informed judgment" for the facts in the determination of cost of service of the natural gas pipeline?

This is apparently what it has done in recent rate cases.

Almost seven years have passed since the Federal Power Commission first appeared to be departing somewhat from recognized cost standards in its determinations of the cost of service of a natural gas pipeline company subject to its jurisdiction. In that first instance the United States Court of Appeals reversed the opinion and remanded the case to the commission as to its allocation of costs.¹ Now, the commission, in these four recent cases, involving rate adjustments of natural gas pipeline companies, is again attempting to substi-

tute its "informed judgment" or "equity" for the facts in the allocation of costs.² Thousands of pages of testimony, hundreds of exhibits, and numerous witnesses dealt with the problem of the *total* cost of service in these cases—for both sales subject and those not subject to the jurisdiction of the commission — particularly the items of depreciation, operating expenses, taxes, and return. Additionally, there was considerable detailed testimony with respect to the portion of such total costs relating only to sales subject to the jurisdiction of the commission. The commission, however, chose to exercise its judgment in this allocation process in a manner this writer believes to be at variance with recognized and accepted prin-

*For additional personal note, see "Pages with the Editors."

¹Mississippi River Fuel Corp. v. FPC (1947) 69 PUR NS 129, 163 F2d 433.

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²Opinion No. 225, *Re Atlantic Seaboard Corp.* Docket Nos. G-1384 and G-1175; Opinion No. 228, *Re Northern Nat. Gas Co.* Docket Nos. G-1382, G-1533, and G-1607; Opinion No. 234, *Re Mississippi River Fuel Corp.* Docket No. G-1641; and Opinion No. 235, *Re Colorado Interstate Gas Co.* Docket No. G-1115.

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ciples of cost allocation to the extent that the apparently mathematical exactness of the final answer reached by the commission is actually an illusion.

THE process has all the attributes of "the hand being quicker than the eye." Taken in slow motion, however, the transition from fact to judgment becomes clear in the following three brief excerpts from Opinion No. 225 in the Atlantic Seaboard Case:³

We are unable, however, to accept the premise that merely because certain costs do not vary with use they automatically become *in toto* demand or capacity costs. (Op. 225, page 20.) . . . It follows that reasonably accurate results can be achieved only by allocating *fixed* expenses flowing from the capital outlay to both operating functions, *viz.*, capacity and volume. (Italics supplied.) (Op. 225, page 21.)

The determination of how much of the *fixed* costs is assignable to each function, demand or *volume*, involves judgment. (Italics supplied.) (Op. 225, page 23.)

Thus, a cost which does not vary with volume is none the less partially (usually 50 per cent) considered a volumetric, variable cost. It then becomes necessary for the commission to rationalize how much of a fixed cost should be transformed into a variable cost. The common flip of the coin or the usual 50-50 split was the result and labeled "informed judgment" or "equity." How much farther can one get from the facts? The judgment exercised by experts in the field of cost allocation is not how much of a fixed cost should be called a volumetric

cost, but how much of a cost that is actually partially fixed and partially variable is actually fixed and variable, respectively. One is the exercise of judgment in the distortion of the facts and the other is the exercise of judgment as to the facts in the absence of exact knowledge.

OBVIOUSLY, if the Federal Power Commission is determining its results in rate considerations by its "informed judgment," then certainly the natural gas industry is confronted with a very serious problem. In fact, the Natural Gas Industry Committee in its brief and recommendations to the commission in the Natural Gas Industry Investigation, Docket No. G-580, called attention to the fact that the method unfairly burdened the business not subject to the commission's jurisdiction.⁴ Subsequently, the subject was one of those sought to be clarified in proposed amendments to the Natural Gas Act in the first session of the 80th Congress. In this connection it is significant to note that in the discussion of the problem of long-distance transportation of natural gas and particularly the important relationship of price and cost of gas in the market areas, the Smith-Wimberly report in the Natural Gas Investigation, Docket No. G-580, did not adopt these departures in method in the allocations made therein.⁵

⁴ Brief and recommendations of Natural Gas Industry Committee, before the Federal Power Commission, Docket No. G-580, page 31.

⁵ The Smith-Wimberly report notes, however, that the cost behavior analysis used "is not to be confused with appropriate cost allocations for rate-making purposes." Why there should be a distinction between a cost allocation for rate-making purposes and for the purpose of analyzing basic and long-term regulatory and economic problems of the industry, is not explained.

³ Opinion No. 225, *Re Atlantic Seaboard Corp.* Docket Nos. G-1384 and G-1175.

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That the departure of the commission from the facts in its cost allocations leads to inequitable results has

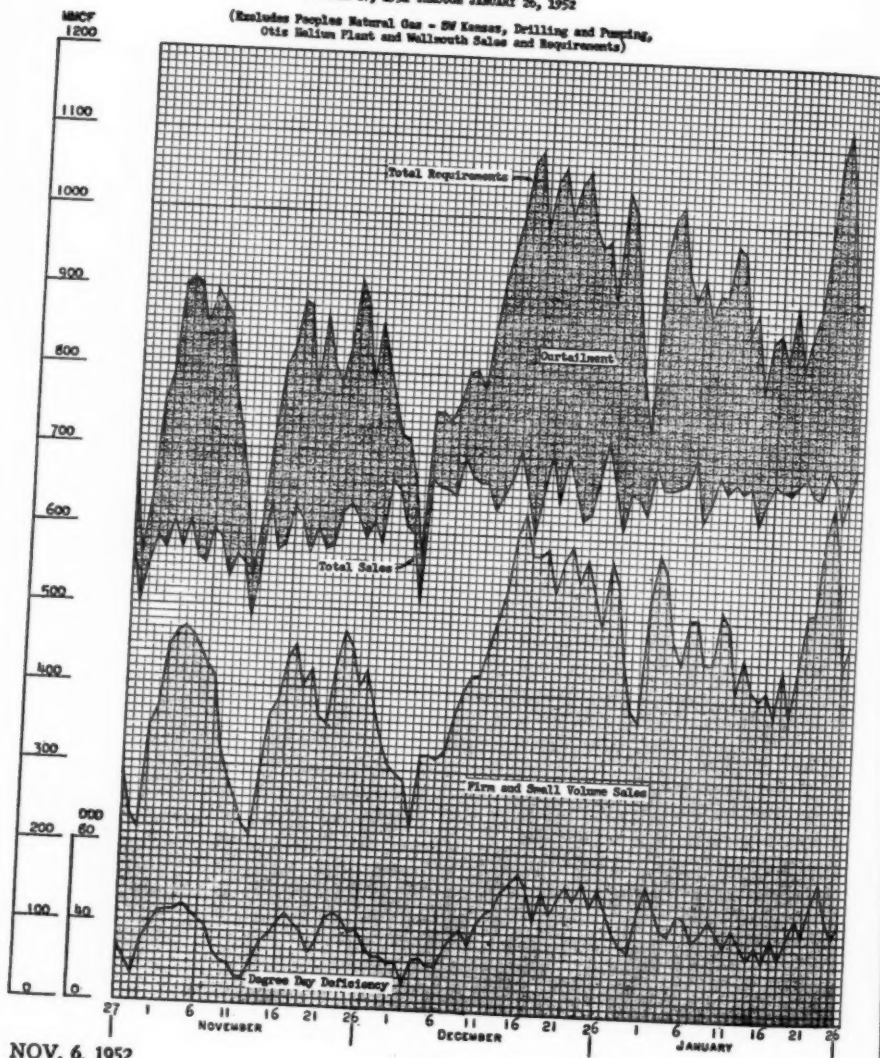
already been commented upon by the natural gas industry. This is also clear from an analysis of the recent

Docket 9-1881

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NORTHERN NATURAL GAS COMPANY
DAILY SALES AND REQUIREMENTS
OCTOBER 27, 1951 THROUGH JANUARY 26, 1952

(Excludes Peoples Natural Gas - SW Kansas, Drilling and Pumping,
Otis Helium Plant and Wellmouth Sales and Requirements)



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opinions. For example, in Opinion No. 234, Mississippi River Fuel Corporation, it is found that the difference in the average cost of service obtained by the commission between firm and interruptible direct sales is about three-fourths cent per MCF, or 4.5 per cent. The evidence shows (Exhibit 77) that the firm customers received practically 100 per cent of their requirements every month of the year, whereas the interruptible customers were substantially curtailed seven months of the year, and in December, 1950, received only 34 per cent of their requirements for gas during that month. Certainly, no one familiar with the cost of transporting gas would contend that the cost of providing such transportation on a firm basis is only 4.5 per cent more than for the customers for whom no firm capacity is provided and who must get off the line and have their service curtailed or discontinued on numerous days of the year to insure gas for the firm customers. If prices were based on such costs, no one would take interruptible service and then the true cost of firm service would immediately become apparent when the pipeline attempted to meet such demands by the investment of millions of dollars in additional pipeline capacity.

As a further example of the inequitable results of the commission's allocation process, in Opinion No. 228, Northern Natural Gas Company, the allocation of the commission resulted in a higher average cost of gas to communities in the Hugoton gas field area in Kansas than to other communities along the line, some of which are over 800 miles away. Also,

in this case, the commission found that the total cost of service for the delivery of approximately 193 billion cubic feet was almost \$38,000,000, or 19.67 cents per MCF. After the allocation process the average allocated cost of service for sales subject to its jurisdiction is 19.95 cents per MCF. Thus, there is only a difference of about one-fourth cent per MCF from the results that would have been achieved if no allocation of costs had been made and all customers' costs had been computed on a straight average or volumetric cost basis. The commission staff introduced an allocation on an average cost per MCF basis but did not recommend its use. The commission apparently ignored that method entirely. Yet the commission came out with nearly the same result through a much more detailed and complicated process. This raises the serious question of whether a method of allocation can be just and equitable which yields almost the same results as a method that is claimed to be inequitable.

MANY industries and commercial establishments have similar load-factor problems of a daily or seasonal nature. The cost of providing additional rides to be used by an owner of a weekly pass on a streetcar or bus is practically negligible. Airlines, hotels, and others provide off-season service at substantially reduced rates. A 4.5 per cent price differential in such instances would be ludicrous, of course. Yet, these customers receive a higher-grade service than the interruptible gas customer. The winter guest at a summer resort hotel is not obligated to give up his room if the summer



Industrial Peter versus Residential Paul

"THE large industrial interruptible load is becoming less and less competitive in relation to other fuels. The price of natural gas to interruptible customers, as a result of this expansion at higher costs, is rapidly reaching these competitive levels in some areas. How long these interruptible customers will continue to take natural gas at prices requiring the subsidization of the house-heating market is a serious question."

guest should decide to come back for a day or week or two. The airline passenger at reduced rates is not required to wait for a seat made vacant by full fare passengers or to give up his seat when he has completed half his trip because a full fare passenger came along. Yet, such is the inferiority of service to the interruptible gas customer. If these industries were forced to price their services in accordance with costs developed by the method of allocation used by the Federal Power Commission, the result would be obvious. There would be few if any off-peak users and the cost of on-peak service would thereby be materially increased.

THE problems and issues involved in the cost allocations for natural gas companies are somewhat complicated. The problem is important for,

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as the court pointed out,⁶ "Since the classification of items of cost was the direct control over the amount included in the costs of regulated sales, the commission could not be arbitrary in that classification, any more than it could be in a simple refusal to include a proper cost." It is not possible in the short space of this article to review the testimony and exhibits on the subject even in any one of the four recent cases. In the Northern Natural Gas Case the subject occupied over 1,100 pages of transcript and 37 exhibits. In the Mississippi River Fuel Case there were almost 950 pages of testimony and 29 exhibits. It is proposed, therefore, to comment only upon the major departures of the commission in its recent orders and the probable impact upon the natural gas industry.

⁶ Mississippi River Fuel Corp. v. FPC, 163 F2d 433.

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As early as 1896, W. J. Greene⁷ proposed that for cost determinations the total cost of service be divided into three groups: demand, commodity, and customer. For a natural gas pipeline company, customer costs are minor and accordingly there are only two principal cost categories; namely, demand and commodity. This process of segregating total costs is frequently referred to as the classification of costs, the first steps in the allocation process. The same segregations are almost universally used today by rate experts in the utility field. Since that early date, there has been little controversy as to what costs are fixed and belong in the demand category and what are variable and belong in the commodity category. Considerable difference has existed, however, as to the proper basis of allocating costs that are properly fixed or demand costs, which is the second and a distinctly different step in the allocation process. In fact, from time to time, various methods for allocating the demand costs have been proposed.⁸

It remained, however, for the Federal Power Commission in 1945 to shock some experts, including its own staff witness⁹ by claiming that a 100 per cent fixed cost, such as depreciation, should not be classified as a 100

per cent demand cost. Thus, the very cornerstone of the entire cost allocation process was removed. Yet, the commission continued to construct framework for its decisions on the apparent basis that their process still had a foundation. The reason why a cost which is 100 per cent variable remained a 100 per cent commodity cost, but one that was 100 per cent fixed must be split 50 per cent as fixed (demand) and 50 per cent variable (commodity), has never been explained satisfactorily. When the commission first departed from the accepted method, as already noted, the court reversed and remanded the case. The court stated:

... Where, as here, the commission rejects all formulae used in the testimony and those heretofore followed by it and the courts, the nature of the new proposal must be clear enough for the courts to exercise the function of review imposed on them by the statute.¹⁰

Actually, no new reasons for the departures are given in the present series of commission opinions. The formula used is still a nameless one without any definition of factors and, accordingly, is not a method but merely a theory or process imposed on natural gas companies by administrative fiat. The record now contains testimony by a commission staff witness which was absent before in support of the commission's first Mississippi Case departures. The commission in its opinions does not really rely on such testimony but advances essentially the same reasons it gave in the first case. For example, in the first

⁷ *Electrical World*, February 29, 1896, page 222.

⁸ "Allocating Capacity Costs," by W. J. Greene, *Electrical World*, May 29, 1926, page 1190. "Proposed Allocation of Demand Costs," by H. W. Hills, *Electrical World*, January 29, 1927, page 249. "The Complete Peak Method," by John Oram and H. H. Robison, *Electrical World*, August 25, 1928, page 359, and many others that could be cited.

⁹ Since the first Mississippi River Fuel Corporation Case, this same staff witness has adopted the commission's views.

¹⁰ *Mississippi River Fuel Corp. v. FPC* (1947) 69 PUR NS 129, 163 F2d 433.

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Mississippi Case, the commission stated:

... Surely the customers interrupted only a few days a year should not receive free use of the pipeline with the result that the customers served during the peak period pay all those costs.¹¹

And now, in the most recent case, the commission states:

... Conceivably under such an allocation large quantities of natural gas could be sold to industrials 360 days of the year and interrupted on five or so peak days, and such gas would bear none of the costs incurred in constructing the pipeline facility.¹²

THE commission chose the Atlantic Seaboard Case to expound its departures, although the cost of interruptible service was not even involved in that case. Yet, in subsequent cases, where the cost of interruptible service is a major factor, the commission refers to its statements in the Atlantic Seaboard Case. Thus, not only does the commission use the same reasoning in these subsequent cases again but it fails to recognize an important change in facts brought about by the elapsed seven years.

For example, on the Mississippi sys-

tem interruptible customers receive very inferior service and are now curtailed extensively. This same situation prevails in the case of Northern Natural Gas Company as shown by the exhibit which the writer introduced before the commission in Docket No. G-1881 and which is reproduced here (page 682). Seven years ago interruptible customers on most, if not all, natural gas pipeline systems had their service discontinued much less extensively than today and in the first Mississippi River Fuel Case the record showed that such customers were rarely curtailed.

IN the present series of opinions much is made of the fact that demand and commodity are both important cost elements. Certainly this is nothing new. It has been known at least since 1896. Emphasis is also placed on the fact that judgment is required in the allocation of costs and that it is not an exact science. This likewise is a known fact of long standing. But, the judgment required is that necessary to determine what part of certain cost elements are fixed and what part variable, what peak period to use and what cost zones, if any, should be established, and not that of judging how much of a known fixed cost

¹¹ *Re Mississippi River Fuel Corp.* (1945) 4 FPC 340; 63 PUR NS 89.

¹² Opinion No. 225, *Re Atlantic Seaboard Corp.*, page 21, mimeographed copy.



Q "NATURAL gas today is a bargain fuel, particularly to the domestic users, and is in short supply in many market areas. In some areas it has been necessary to restrict the use of gas for house heating by prohibiting or limiting the number of additional new house-heating customers. Underpricing this service below its real cost at the wholesale level will, of course, greatly increase the market pressure for such service."

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should be classified as variable. Further, it will be found that the commission in its recent opinions relies heavily upon the generally accepted 50-50 split between demand and commodity for return to support a similar 50-50 split for other costs. However, as to return, the court held that its equal distribution between demand and commodity "is an established treatment of this item."¹³ Such cannot be said with respect to the other items to which the commission would now apply the same reasoning. In fact, just the opposite is true.

As a matter of fact, the present method of the commission is based on some sense of "equity"—that to do otherwise would permit natural gas companies too much profit on sales over which Congress denied the commission the right to regulate such profit. As one well-known economist observed in discussing the subject of cost allocation:

There is, in fact, hardly any limit to the number of plausible solutions that can be suggested. Equity from which they mostly start, will support anything.

Cost is therefore a function of change. It can be found only by inquiring how expenditure is altered if output is altered. Once we start from this point only one solution is possible, that which corresponds to the facts of change, and all others must be rejected.¹⁴

That "equity" is a result and not a method of cost allocation was also testified to by E. L. Fischer, a rate ex-

pert for certain of the interveners in the Northern Case, in commenting upon the allocation of the commission staff witness:

It has been my experience that equity is best obtained by hewing to the facts, as closely as facts can be determined, rather than individual judgment of what equity is, or what proper equity should be.¹⁵

This comment applies equally to the opinion of the commission because it adopted or rephrased the testimony of the staff witness in practically all particulars.

It is not proposed herein to argue the merits of the issues involved in the allocations presented in the recent cases before the Federal Power Commission. If one or more of these cases is taken to the courts it may be expected that the courts will decide whether "equity" is a result or a method of cost allocation. However, in the meantime, the impact of the commission continuing the procedure of subsidizing firm service, resold primarily to domestic, commercial, and small industrial customers, at the expense of the returns from large-volume interruptible industrial sales, may have far-reaching effects on the natural gas industry.

Natural gas today is a bargain fuel, particularly to the domestic users, and is in short supply in many market areas. In some areas it has been necessary to restrict the use of gas for house heating by prohibiting or limiting the number of additional new house-heating customers. Underpricing this service below its real cost at

¹³ Mississippi River Fuel Corp. v. FPC (1947) 69 PUR NS 129, 163 F2d 433.

¹⁴ W. Arthur Lewis, professor of economics, University of Manchester—"Overhead Costs," pages 46, 47. George Allen and Unwin, Ltd. 1949.

¹⁵ Re Northern Nat. Gas Co. Docket Nos. G-1382, G-1533, and G-1607. (Tr. 4118.)

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the wholesale level will, of course, greatly increase the market pressure for such service. This forces pipeline companies in their efforts to meet public demands to build substantial capacity increases at costs much higher than existing capacity. Many millions of dollars are thus invested in pipelines, compressor stations, and storage facilities in order to supply a bargain fuel below cost and at low load factor to this stimulated demand. Likewise, the same situation prevails with respect to the necessary investment by the companies distributing the gas to the ultimate user.

THE large industrial interruptible load is becoming less and less competitive in relation to other fuels. The price of natural gas to interruptible customers, as a result of this expansion at higher costs, is rapidly reaching these competitive levels in some areas. How long these interruptible customers will continue to take natural gas at prices requiring the subsidization of the house-heating market is a serious question. What would happen if the pipeline lost the interruptible load? In the case of Mississippi River Fuel Corporation,

even at present cost levels in accordance with the allocation of the commission, the rates for firm service to distributing utilities would be increased by not less than 30 per cent to cover the return, taxes, and depreciation alone borne by the interruptible customers. Such an increase would be in addition to rapidly increasing costs of gas purchased in the field by pipeline companies and increasing costs of operation. Under such circumstances it is conceivable that some house-heating customers may find natural gas no longer a bargain fuel.

ALTHOUGH the commission is charged with a public responsibility to the ultimate consumer, it would appear on the surface that the latest cost allocation process used by it unduly favors the ultimate residential consumers, particularly the house-heating customers. However, it also appears that, over the long run, if the commission continues on this road, time will show that the best interest of the domestic consumer has not been served.

In the long run, the best interest of the entire public is served by prices based on sound economic principles.

A Good Engineer Can Wreck Anything

A DOCTOR, an architect, and a politician were in a discussion as to which was the oldest profession.

"Certainly mine is the oldest profession," said the doctor. "You read in the early part of Genesis that a rib was taken from Adam to make woman—that's surgery."

"But even before that," replied the architect, "the Bible tells us that out of darkness and chaos order was created—that's architecture."

"Oh yeah," replied the politician.

"You've proved my point—who created the chaos?"

—Excerpt from "Safety News Letter."



The Care and Feeding of Corporate Stockholders

The attitude of corporate management towards stockholders may vary with the corporation and the type of stockholders. Here are timely tips on how to treat the more sophisticated investment groups—analysts, banks, insurance companies, etc.

By DALE PARKER*

SECRETARY, COLUMBIA GAS SYSTEM, INC.

A DECADE or so before the turn of the century, Charley, a young "candy butcher" on the Great Northern Railroad, dropped off his train at a small midwestern town, liked it, quit his job, and started a little business for himself.

He prospered. A few years later he was in a position to join with two other men to buy the town's flour mill. They formed a stock company. They sold some of the stock to the town's most prominent lawyer, a banker, the leading merchant, a jeweler, and the hotel proprietor. They hired a head miller, a bookkeeper, and a salesman and went into the business of milling the durum wheat grown on the surrounding prairies.

Whenever a business crisis arrived—as it often does in the milling busi-

ness—Charley would step into Elmer's bank, call at Pete's law office, stop at the big general store and the jewelry shop. In the waning hours of the day, at the corner table in the coffee shop, the milling company would hold a stockholders' meeting.

Occasionally, when one or another couldn't make the meeting, he would say: "I'll go along with whatever Pete says," or "Elmer can vote for me." That was all the proxy needed.

AT the end of the year, when the books were closed, Charley and the other stockholders would meet somewhat more formally in the conference room in Elmer's bank.

There were no stockholder opinions that could not be expressed openly in meeting; there were no differences that could not be talked out face to face.

*For additional personal note, see "Pages with the Editors."

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In short, there were no stockholder relations problems.

Today, it is different.

Charley's milling company is now owned by 10,000 stockholders — who also own all the other plants and properties of a huge, far-flung food-processing corporation.

The history of the milling company started by Charley and Elmer and Pete is no different from the histories of scores of public utilities started by a few enterprising men when the need for a public service became apparent in their home towns. The electric company that started with one 1,000-kilowatt steam-driven generator is now part of a system that serves an entire state. The town whose gasworks were once owned by a single family is now served by a natural gas system that brings the town its fuel from a thousand miles away.

The owners of today's utilities are numbered in the scores of thousands — spread all over our land and in many others.

The managements of today's utilities, in common with the managements of other large corporations, cherish the good opinion of their thousands of stockholders.

The question is, how do you get it?

FOR far too many years, management held aloof from intimate and friendly contact with the people who furnished the money to put or keep the company in business.

In what might be called the Dark Ages of stockholder relations, the attention paid to an inquiring stockholder was meted out in proportion to the number of shares he held. Far more concern was shown for the hold-

ers of mortgage bonds than for one of the actual owners of the company property.

If a stockholder had the temerity to appear uninvited at an annual meeting of the corporation, he got a pince-nez glare that said plainly, "What are *you* doing here?" If he had the gall to ask a question, there were trained seals ready with diversion tactics designed to save the chairman's face—or he was told politely to shut up.

It was an age when the communication of information about the company was held to a minimum. The annual report was a forest of figures through which roamed elongated sentences, growling the unintelligible words of primitive accountancy. The atmosphere was the fusty air of the counting room.

It is not clear when the dawn started breaking in the mahogany paneled board rooms. It is not clear because the new light on stockholder relations is still dawning.

Some people in management will have to die before their companies can take steps to win the understanding and sympathy they need from their stockholders.

THE country's corporations now fall within three categories. The still benighted, the enlightened, and those who are in the twilight in between because they want to do *something* but don't know what to do or how to do it.

But on all sides, there is a growing fund of evidence that the problem of stockholder relations is being approached as it should be—as a problem in *human* relations.

There are three kinds of stockhold-

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ers: The professional, the sophisticated, and the common or garden variety of solid American citizen who buys a piece of your business with the belief that it will make his future and his station in life more secure.

He doesn't talk about it much, but he is very proud of those few shares of your stock he has tucked away in his safe-deposit box. To him his little bundle of certificates represents a personal achievement. And every dividend check he gets reaffirms his faith in his own good judgment.

He looks at the market reports only occasionally. If your stock goes up on the market—very good. If it goes down a few points—he may be a little concerned, but not panicked. Because he is an investor in public utilities—not a speculator. He has bought your stock because it is steady; because it pays dividends regularly. And because, inferentially, he has faith in your management.

MORE and more, it is this fellow—the average American stockholder with one or a dozen or a hundred shares of your stock—that your management is trying to reach.

The reason for it is very simple. Individually his proxy does not add greatly to the total vote for the com-

pany's management. But on the scales of public opinion he carries as much weight as the sophisticate who owns 10,000 shares of your stock.

His good opinion may prove of greater value to you than your stock is to him. For in this day when your utility business is looked upon hungrily by those in big government who would "nationalize" your business, you need all the solid American public opinion you can get.

The acts of the welfare state, I believe, have been the chief cause for many of the stockholder relations programs that are now operating in the American business scene.

That, of course, is not the only cause. Most, I believe, have been instituted because management has become truly enlightened—has dropped its "none-of-your-business" attitude and recognized the value of good relations with its most important public.

Some have started too late, though. Management of one corporation recently was engaged in the rehabilitation of its business. It had cleaned house, re-established the company's earning power, and was pouring profits back into the business to improve it further. It did this without telling its stockholders what it was all about.



Q "THERE are three kinds of stockholders: The professional, the sophisticated, and the common or garden variety of solid American citizen who buys a piece of your business with the belief that it will make his future and his station in life more secure. He doesn't talk about it much, but he is very proud of those few shares of your stock he has tucked away in his safe-deposit box. To him his little bundle of certificates represents a personal achievement."

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IT woke one morning to learn that a recent purchaser of a few shares of stock had started a proxy campaign. He was soliciting proxies simply by pointing to the improved earnings and the lack of dividends and asking, "What are you getting out of this?" The management was tossed out.

It is all very well to say, "Let's have a stockholder relations program." But where do we start?

It starts, of course, with management itself. In management's attitude toward the business; with management's business philosophy.

If that philosophy is one which puts management in its proper place, then you are well on your way toward a successful program. If management's attitude is this: "I am here to work in the interest of all the owners of this company. I have a trusteeship"—then you can proceed to use all the means of communication that are at hand.

It has been a business habit to shrug off stockholders' interest by saying, "All the stockholder cares about is dividends—the bigger, the better. If they don't like what we are doing they can sell their stock." This is slovenly thinking. A stockholder is not a member of a strange or different species. He is no different from anyone else. He is a person. And like every other person he likes personal recognition.

Pearson Hunt of Harvard puts it this way in the *Harvard Business Review*:

... the typical stockholder (large or small) desires a sense of belonging to the organization—a feeling that management recognizes that its powers derive from him even if in fact

he is not active in using them. This feeling has been stated as "the sense of security that comes of close acquaintance." Any management which really acts in the stockholders' interest but fails to cultivate a feeling of mutuality misses an opportunity. It also risks financial embarrassment in the future. In the broader sense, it fails to do what it can to integrate the stockholder and his interests with the interests of the corporate system—a goal best achieved by a series of actions creating good relationships, over a period of time, not by some intense, over-all campaign for the grand purpose.

Now let's look at some of the things that can be done to bring the stockholder and management closer together.

Study your stockholder list. The list and the transfer records will tell you a great deal more than just the names and addresses. It is good practice to analyze list and transfers at regular intervals. It will give you geographical distribution of holders, areas of concentration, sex of owners, family holdings, the proportion of brokers and nominees, the trend of investment by institutions and investment trusts, areas of activity, and much other information that could affect policy.

The welcome letter. This is the first chance to recognize the newcomer and, if it carries a note of real sincerity, it will establish a feeling of being "wanted."

The annual report. This has been thoroughly discussed over and over again. Yet some companies still obscure the facts of their business year in language that only the professional stockholder or accountant can understand. Remember that the profes-



Answering Stockholders' Mail on Time

"It is good practice to answer letters of inquiry from stockholders within twenty-four hours. A prompt reply is flattering—a delayed one gives almost the same impression as no answer at all. Some companies make it a practice not to answer the 'irate' stockholder by letter. They call the complainer on the telephone at his home or office. Such personal attention usually quells the 'beef' and sometimes makes a staunch friend of the stockholder."

sional, being a person, can understand simple language, too.

Quarterly letters. The same goes for these. Pictures, a drawing, short paragraphs, and understandable language will help keep them out of the wastebasket long enough to be read.

The proxy statement. It doesn't have to be ponderous. The same rules apply to this as apply to any other form of friendly communication.

The proxy "thank you." Some use it; some don't. And that is about the best way to describe its usefulness.

THE annual meeting. Few can attend but those who do should be made welcome and treated as joint "owners" of the business. Even the professional heckler can be favorably impressed by a benevolent but firm chairman.

The postannual meeting report.

This is an important though sometimes neglected opportunity to bring the stockholder up to date about his company's affairs. The stockholders who sent in their votes by proxy—and, too, those who did not—should be told how they added up—especially if there was an issue in controversy. Some utility companies use this vehicle to acquaint their stockholders with the effects of regulation, the outlook for the coming year, new financing, and other items of major interest. This, too, should be made palatable reading.

Regional stockholder meetings. This has been done by several companies with varying results. It does not reach the mass of stockholders in a company whose stock is widely held. It does, however, provide a publicity springboard for communication with the public and other stockholders. Incidentally, one company has broadcast

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its annual meeting by radio, with a running commentary by a newspaper columnist.

The "open house." Some companies conduct plant tours for groups of stockholders and have found this technique quite effective. The number of stockholders who can be reached by this method is limited.

LETTERS *in answer to letters.* It is good practice to answer letters of inquiry from stockholders within twenty-four hours. A prompt reply is flattering—a delayed one gives almost the same impression as no answer at all. Some companies make it a practice not to answer the "irate" stockholder by letter. They call the complainer on the telephone at his home or office. Such personal attention usually quells the "beef" and sometimes makes a staunch friend of the stockholder. In any event, letters in reply to stockholders' queries should contain the answers—not a courteous brush off.

Telephone inquiries and inquiries in person. Here, too, courtesy and sincerity pay off.

The regret letter. It is quite possible that one who sells his stock may resent an official recognition of the transaction and feel that it is "none of your business."

Special communications. There come times in every corporation's life when management is confronted by a crisis. The news is bad. Under management's trusteeship philosophy, this bad news should go to the stockholders, too. One big utility recently, faced with declining earnings because of the lack of favorable action by state and Federal commissions, spelled out the story for stockholders in a special

booklet. The completion of a new generating plant, the laying of a new pipeline, or the acquisition of new transportation equipment, all are good subjects for a special informative letter or booklet.

PERSONAL *contact.* It is fairly easy for a company chairman or president or any other officer to know and be on intimate terms with a few or even all of the people who hold large blocks of their company's stock. It would be ideal if all corporate officers could know all the company's stockholders. Obviously this is impossible in a company where millions of shares of stock are held by tens of thousands of stockholders.

But that does not mean that at least an effort cannot be made in this direction by some officer of the corporation.

The secretary of one large utility holding company has called upon and talked to virtually every stockholder who holds a thousand shares or more of the company's stock and many, many others holding lesser amounts.

It might be well to review some of his findings here.

He found that in communities where there were one or more thousand shareholders, there was also a concentration of holders of lesser amounts. He found that his personal visits to his "Thousand Share Club" members also had an effect on other holders in that community. The word got around that a corporate officer of the company had paid a visit to Mr. Soandso—just to pass the time of day and inquire if Mr. Soandso had any question to ask about the company and its management. The secretary

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also made it a practice to call on the local banks and the local brokerage houses when he was in town.

HE warns, however, that it is not an easy job. It requires plenty of advance study and planning. It should be done at some time other than during the proxy solicitation period to avoid the appearance of asking favors or "selling." He says that in this activity, as in all human relations, sincerity is the keynote. And the caller must be quick to sense the common ground on which he and the stockholder can talk.

It pays off in a large way. For example, a few years before the secretary undertook his personal contact campaign, his company's management got a quorum for its annual meeting by a fraction of one per cent. Last year the votes of nearly 87 per cent of the outstanding stock were given the management and those votes came from over 82 per cent of the holders, both large and small.

The secretary does not claim that his personal visits alone were responsible for this favorable change in proxy returns—but, he feels sure they helped.

How to treat the professionals. Securities analysts, banks, and insurance companies are the most sophisticated of all investors. They need more information than would be palatable to the average stockholder.

Some utilities are very meticulous

in cultivating these professionals. One of the larger companies each year builds a book of information that covers every aspect of the business. This book is presented to a carefully selected list of analysts at a luncheon or dinner where they are given a briefing, complete with slides and charts.

Insurance company representatives get the same treatment.

The principle on which this company operates is that a *complete* disclosure must be made to these people—every question must be answered without equivocation.

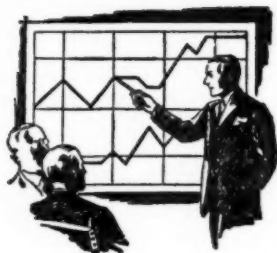
NOW, these devices for the care and culture of the corporate stockholder are not listed here with the idea that *all* of these things must be done if a stockholder relations program is to succeed. They are some devices that *can* be used if the situation calls for them. Above all, management must discriminate—decide which means should be used under existing conditions.

The most effective device is not a device at all. It lies in the very hearts of people in management. It is the sincerity with which the people in management deal with the affairs that are entrusted to them.

And while we realize that the average American stockholders like to feel they belong to your organization, let us not be deceived. Let us face it. We belong to them.

“We must warn ourselves, over and over, that we cannot have something for nothing. The wages of state welfare is the tyranny of the state.”

—RAYMOND MOLEY,
Columnist.



Training Men for the Gas Industry

There is one institution of higher learning which, in pursuing a single purpose, actually serves two: the gas industry and the general public. This unique educational institution is the Institute of Gas Technology.

By JOSEPH D. PARENT*

DEAN, INSTITUTE OF GAS TECHNOLOGY

THE Institute of Gas Technology, affiliated with Illinois Institute of Technology in Chicago, is unique among institutions of higher learning in that while it has but one purpose, service to the gas industry, which founded and supports it, in fulfilling this purpose it renders a public service in training men for careers in this essential industry.

The institute's educational objective is carried forward in three phases: The first of these, the fellowship program, is the training at master's and doctoral levels of selected graduates in chemistry and physics, and chemical, mechanical, and petroleum engineering, of demonstrated academic ability, adaptability, co-operativeness, and of high moral character. The second is

through a series of refresher courses offered in 6-week summer periods to industry personnel, presenting the four basic areas in the gas industry: natural gas production and transmission, manufactured gas, distribution, and utilization. The third is through home study courses, designed to reach those who are unable to attend classes at the institute.

OF these phases the major emphasis has been placed on the first, the fellowship program of graduate study. The institute offers fellowships leading to the degrees of Master of Gas Technology and Doctor of Philosophy which provide for the payment of all tuition and fees and a stipend adequate to meet living costs. The program was initiated in 1941 and has become the single source of

*For additional personal note, see "Pages with the Editors."

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graduate students specially trained in gas technology.

THE institute's educational program is the gas industry's own answer to a deficiency in the programs of other schools of higher learning: While every technical college has a department of electrical engineering, none has a department of gas engineering; of the few schools which offer undergraduate courses in some phases of gas production and transmission, none offers a graduate program in these subjects.

In employing engineering graduates from schools other than IGT, gas companies are required to provide periods of indoctrination and training before giving them positions of responsibility. This introductory training is costly, time-consuming, and may fall short of providing the well-rounded background essential for advancement to administrative levels.

The lack of a source of men specially trained in gas industry fundamentals, and the costliness of providing this training within each company, highlighted the desirability of having a central educational facility dedicated to the gas industry when, in 1939, a research institute organization committee was charged by the executive board of the American Gas Association with the responsibility of investigating methods for advancing the industry's technology. This committee, under the chairmanship of Frank C. Smith, president of the Houston Natural Gas Corporation, discovered that none of the existing research laboratories were concentrating on the solutions of the vital problems essential to the continuing im-

provement of the industry's service to the public, pointing out the advisability of creating a centrally located research facility dedicated exclusively to the gas industry. Its study showed that the consolidation of both the educational and research facilities into a single institution offered unusual advantages in the integration of graduate study with industry research.

THIS committee recommended establishment of an independent educational and research facility to be supported by direct contributions from "member" companies. An "institute planning committee" was formed, headed by Frank H. Lerch, Jr., chairman of the board of Consolidated Natural Gas Company, and as a result of the work of the two committees, the Institute of Gas Technology was incorporated in June, 1941, and later affiliated with Illinois Tech, one of the nation's larger technological schools.

IGT is a nonprofit membership corporation with control vested in a board of trustees numbering twenty-eight, twenty-two of whom are selected from candidates designated by member companies. The president and five members of the board of trustees of Illinois Institute of Technology complete the group.

The financial support of the institute is derived from associate members' dues and from contributions. The liability of the associate member for financial support of the institute is the subject of a written contract. Over sixty such membership contracts with natural and manufactured gas companies and appliance manufacturers are in effect at present.

Contributions from individuals and

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companies are made for specific purposes such as the fellowship reserve, the purchase of research or library equipment, or to the general operating expenses of the institute.

IGT's educational activities were inaugurated September 22, 1941, when four fellows met in class for their first day of instruction in the new school. Two and a half months later the Pearl Harbor attack drew the United States into World War II, and subsequent enlistments and inductions of students forced virtual abandonment of the educational program.

Between 1941 and 1946 the institute granted degrees to only four men: three Masters of Science and one Doctor of Philosophy. The fact that none of them took employment in the gas industry indicated a weakness in the institute's educational program, which then was directed more toward general science than to specialized training in gas technology.

Toward the end of the war Captain E. S. Pettyjohn was named to his pres-

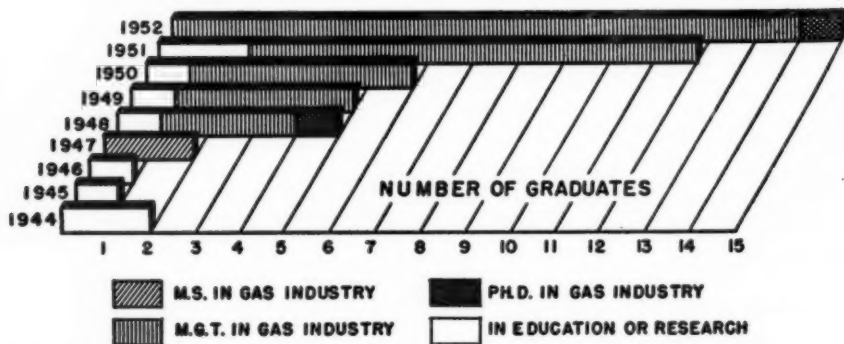
ent position as director, bringing to the institute his wide and varied experience in gas production, in teaching, in gas industry research, and in sales and administration.

NOMINALLY succeeding to the directorship in April, 1945, while still on duty with the U. S. Navy, he was able to act in little more than an advisory capacity at the institute until ordered home in October, 1946. Nevertheless, by spending his leave time at the institute, during this interval he succeeded in re-establishing the educational program, in instilling a new spirit of aggressiveness into the staff, and initiating certain reforms, which together resulted in bringing the institute back into line with the objectives of its founders.

The curriculum was revised to place greater emphasis on gas technology, and starting with the fellows who entered in 1946 as the Class of '48, classroom and laboratory work conformed to this pattern; the men studied to become Masters of Gas Technology.



INSTITUTE'S CONTRIBUTION TO GAS INDUSTRY MAN POWER



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Master of Gas Technology

IN establishing the fellowship program, it was the considered opinion of the institute's founders that maturity and self-reliance could best be obtained by a minimum of two years of graduate study, including two summers of active employment in the gas industry, for the Master of Gas Technology.

The curriculum for the first year includes graduate courses in chemistry, physics, mathematics, and engineering, which may be applied toward a Master of Science degree. In addition, the fellow is given instruction designed to provide an understanding of the basic chemical, engineering, and economic problems of the gas industry, through courses in manufactured gas, natural gas, natural gasoline, transmission and distribution, combustion and utilization of gaseous fuels, analytical procedures, gas literature, and an introduction to research.

Each fellow is required to spend two summers (one preceding and one following his first academic year), in active employment in the gas industry. This gives him practical experience and industrial know-how designed to supplement classroom and laboratory instruction.

The basic knowledge gained in the first-year studies, and in actual contact with industry problems, equipment, and working conditions during the summer employment periods, contributes to fuller comprehension and accomplishment in the second-year program, which includes geology of natural gas, gas-making equipment, and design of distribution systems, plus ancillary courses: engineering economic studies of the gas industry,

business organization, public utility regulation, and labor management.

RESearch upon which the Master's thesis is based is carried out during the second year; this affords the fellow time for a more thorough grasp and understanding of a problem, than if the research and thesis were crowded with all the other subjects into a single year of graduate study.

The additional year of graduate study on the part of the fellow is essential to development of a mature, capable gas technologist, well-grounded in the economic as well as in the operational phases of gas utilities, who can readily adapt himself to an individual company's activities and needs and rapidly qualify for advancement to an administrative level.

Doctor of Philosophy

AFELLOW who demonstrates marked ability in earning the Master of Gas Technology degree may apply for an extension of the fellowship grant to continue through the doctorate, which requires two additional years of study. Before admission to candidacy he is required to pass an examination on engineering judgment and ability, and unless excused on the basis of excellent performances in course work, research, and defense of the Master's thesis, must submit to written and oral qualifying examinations covering both undergraduate and graduate work.

During the third graduate year the fellow is instructed in design of gas plants, thermal cracking, catalytic cracking, modern research methods, coal carbonization, and gaseous reactions, in addition to research and



Gas Research and Private Enterprise

“THE Institute of Gas Technology is concrete evidence of the gas industry's willingness and ability to create and expand a research and educational institution, to contribute to the advancement of its technology and to the training of its men. It is an outstanding example of 'free enterprise' in action.”

electives customary in doctoral programs.

Except for two credit hours of study of instrumentation, and a total of twelve credit hours of electives, the fourth graduate year is spent in research. To secure the Doctor's degree, the fellow must complete a research problem to the satisfaction of his research guidance committee. The results of this research should represent a contribution to basic knowledge in gas technology.

Instruction and Stipend

INSTRUCTION in gas technology is offered by members of the research staff who are particularly well qualified by knowledge and experience; each man so assigned teaches a maximum of one course per semester. This provision insures instruction at the professional engineering level, incorporating current research and development with accepted fundamentals.

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Small classes permit individual instruction and encourage discussion.

Each week throughout the academic year, gas company executives and senior personnel lead discussions on major phases of the gas industry, thus providing the fellows with an additional valuable type of instruction.

Instruction in a liberal number of elective subjects is given in classes of the Graduate School of Illinois Institute of Technology.

All fellows are enrolled in and receive their degrees from the Graduate School of Illinois Institute of Technology.

FUNDS are available to maintain forty fellows in residence; to provide this number, fifteen new fellowship grants are offered each year. To a student working for a Master's degree a fellowship is worth \$4,000 plus his earnings at summer employment in the industry. If he continues to a

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doctorate its value is increased by \$4,800 to a total slightly less than \$9,000.

Fellows do not sign contracts binding them to accept employment in the gas industry; however, each is under moral obligation to give preference to the industry if suitable employment can be found. Graduating fellows are aided in obtaining employment by distribution to member companies and contributors of brochures containing personal and academic data, pictures, and statements of type of work preferred and section of country in which employment is desired. Interested companies communicate with the institute or with the fellows and arrange for interviews. The institute assumes the responsibility of aiding its graduates to find the most advantageous employment consistent with their capabilities, needs, and interests, but the decisions rest with the fellows.

Summer Refresher Courses

UNDER a new program designed to extend the services of the institute in the training of men for the gas industry, 6-week refresher courses in gas engineering are being offered each summer to industry personnel.

The first of these courses, "natural gas" and "transmission and distribution," were presented this year. Twenty-three men, employees of gas industry companies from coast to coast, successfully completed the month and a half of intensive study and received "certificates of accomplishment" in an informal graduation ceremony in mid-August.

In accordance with the plan of the courses, which are designed to familiarize gas engineers with current

problems and practices of the industry, current research, and up-to-date methods of measurement and computation, instruction was given at the graduate level. As industrial practices and problems were presented, relevant fundamentals were reviewed and equations commonly used for engineering calculations were derived. Accompanying this review, emphasis was placed on co-ordination of the various phases of each subject, rather than on an attempt to completely illustrate each commercial operation.

In all cases the men attended the refresher courses at the expense of their employing companies; some employers sent two men. The courses were not a vacation for those who enrolled; the entire morning plus an hour after lunch were spent in classrooms, the remainder of the afternoon in laboratory work, and evenings in homework and in study preparing for the quiz opening each school day.

Some of the registrants plan to return next year, when "manufactured gas" and "utilization of gaseous fuels" will be covered during the six weeks from July 6th to August 14th. The subjects presented during 1952 and 1953 will be alternated during subsequent years, so men interested in completing all four basic courses can do so in any two successive years. By attending these courses, cadet engineers should greatly accelerate their training; more experienced men will benefit by refreshing their knowledge and extending the breadth of their information.

Home Study Courses

THE Institute of Gas Technology home study courses will bring in-

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struction to students and utility employees who are unable to attend classes at the institute. These courses are prepared with the assistance of an advisory committee of the American Gas Association and scores of contributors and reviewers, all specialists in their particular fields of utility operations.

THE plan for these texts is to so present the subject matter that it can be understood by a person with little or no technical training. However, the coverage is sufficiently comprehensive that the courses can be integrated with cadet engineering programs, and can serve as "refresher courses" for more experienced utility personnel, particularly the many whose work has been so long restricted to one phase of operations that they have lost contact with the progress of the others.

The first of these courses, "natural gas production and transmission," is in the hands of the printer at this writing and is scheduled for release early this fall. Chemical, physical, engineering, and geological fundamentals are offered early in this course, to aid

those who have had no instruction in one or more of these subjects. The student then progresses, in logical sequence, through each phase of production, gas conditioning, and transmission.

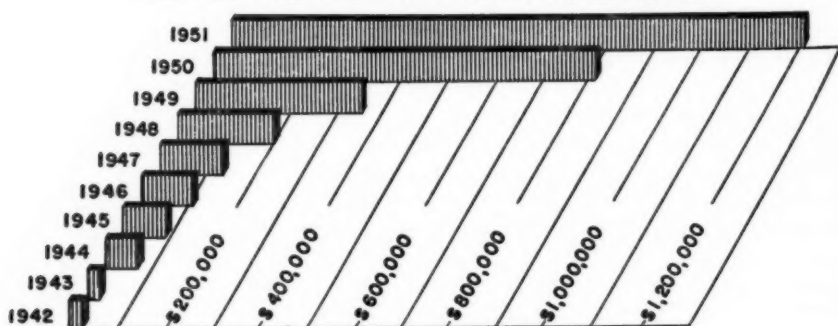
Sections which involve advanced mathematical manipulation are so written that any person not familiar with the mathematics employed may omit the calculations, and by merely accepting the solutions as given, continue reading the sections with understanding.

SOUND engineering has always been wedded to economics, and their relationship is maintained in this course. Economic and legal aspects of certain operations are discussed in the chapters dealing with those operations. The closing chapters contain information essential to an understanding of the business activities (and problems) of natural gas companies.

The preparation of a second home study course, "manufactured gas," is well advanced; publication is planned for 1953.



THE INSTITUTE'S GROWTH IN PHYSICAL ASSETS



NOV. 6, 1952

TRAINING MEN FOR THE GAS INDUSTRY

Enrollment for these courses will not be restricted; they will be offered to all who wish to take them, regardless of previous education or present employment with a utility. On enrollment, the student will be supplied with the complete text, including assignments. He is expected to study each chapter, consult a reasonable number of the references presented, and submit a written report on each assignment. These reports are to be sent to the institute for grading, and will be returned with constructive criticism.

The courses can easily be completed in one year, and must be in two. Successful completion of a course will be recognized by the award of a suitable certificate.

Program Helps Student and Industry

THE wisdom of the institute's founders in combining the gas industry's educational and research activities in a single facility has become increasingly apparent.

The institute strives to promote progress within the industry by prosecuting both fundamental and applied research, by accelerating, intensifying, and expanding the investigation of problems of immediate practical interest, and by co-ordinating application of the resulting knowledge to solutions of the technologic problems which face the industry.

Fundamental research builds toward a future of greater breadth and diversification in gas making, conditioning, transmission, and utilization by providing greater understanding of basic principles and by creating or extending original data; applied research consolidates and extends present operating methods and processes

through innovation or invention and engineering development.

To prosecute this research the gas industry has furnished the institute's service laboratories with all equipment necessary for analysis and testing of gas-making raw materials and products and for calibration of instruments used in the industry. The institute's research and process development laboratories, and the pilot plant made available to the institute at Crawford station of The Peoples Gas Light & Coke Company, contain the equipment needed for gas production, transmission, distribution, and utilization studies.

THE institute's equipment represents the latest advances in analysis and research, and the most modern of instruments. These facilities are employed in instruction, and may be used by students in thesis and dissertation studies. In this the institute provides an unusual opportunity for initiating new investigations and carrying them through the preliminary stages most economically. The approach to a given problem may be explored by a fellow for his Master's thesis; if the results provide a basis for continued interest, more intensive basic research may be made the subject of a doctoral dissertation.

The thesis and dissertation may provide the initial information necessary to formulation of a research project which can then be carried forward by the research staff with the institute's own funds or under sponsorship of a member company or association of companies.

Thus, although students do not participate in sponsored research, the

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fellow whose thesis and dissertation lead to a research project has compensated the gas industry for its investment in his education.

In summary, the advantages of the institute's combined educational and research activities are:

The student benefits by the excellent facilities available to him, and the opportunity to study under the instruction and guidance of scientists and engineers whose knowledge has been broadened by daily work on problems of current and future interest to the gas industry.

The gas industry benefits by securing personnel trained specifically for the industry at the postgraduate level, and by the institute's research program, in which fundamental data collected in Masters' theses and doctoral dissertations often are the bases of sponsored projects directed toward improvement of existing processes or development of new processes for the gas industry.

The Plan Fulfilled

IN little more than a decade the institute has become an outstanding educational and research facility, representing an investment of one and one-quarter million dollars in physical plant. It has graduated five Masters of Science, twenty-seven Masters of Gas Technology, and two Doctors of Philosophy. It has developed and trained in the solution of industry problems a research staff of forty and a total staff of more than sixty. It has undertaken, has in process, or has completed some ninety fundamental and applied research projects.

The Institute of Gas Technology is concrete evidence of the gas industry's willingness and ability to create and expand a research and educational institution, to contribute to the advancement of its technology and to the training of its men. It is an outstanding example of "free enterprise" in action.

How Can You Tell When You're Broke?

"THE Council of Economic Advisers in its January report to the President states, 'We do not believe the economic limit of taxation has been reached.' Brought up as I was under such old-fashioned 'horse and buggy' notions as making ends meet with a little left over for the inevitable rainy day, 'Economics' offers a most fascinating field to explore. One can be so delightfully casual in locating the decimal point, particularly when fixing the other fellow's taxes. For 1951, the system taxes were \$18,870,000, up \$8,182,000 from 1950. The tax bill was more than twice the amount provided for depreciation, more than the cost of all the natural gas sold, and almost twice the net income. For myself I am convinced that 'the economic limit of taxation has been reached' and long since passed. Certainly I must have much intelligent company in this conviction."

—WILLIAM G. WOOLFOLK,
Chairman, American Natural Gas Company.



The Gas Industry's Man-power Problems

An interesting but plain-spoken review of the gas industry's problem in attracting and holding valuable personnel, particularly in the younger men.

By F. O. ROUSE*

THE basic man-power problems of the gas industry, for the most part, arise from the shortage of qualified men to handle the expanded work. Many foremen and supervisors today were rank-and-file laborers yesterday. Many supervisors, superintendents, and managers today were in less responsible jobs last week. And some managers, executives, and company officials today were technical men or specialized supervisors or subordinate department heads not long ago. Some, indeed, were almost strangers to the industry last month. In the future, additional men will have to be brought in and trained if we are to keep pace with the demands of this expanding enterprise.

What does all this mean in terms

*For personal note, see "Pages with the Editors."

of man-power problems in the natural gas industry today? It means that those who for years thought in terms of ten or fifteen employees and hundreds of dollars, today must think in terms of many more employees and thousands of dollars; those whose business lives may have revolved around a few hundred employees and many thousands of dollars, must now expand and sharpen their horizons, their visions, their concepts, their philosophy, and their capabilities to work with problems involving millions of dollars of financing, hundreds of employees, thousands of customers, Federal and state regulations, complicated budgets, continued tax boosts, detailed and elaborate engineering plans, accounting and rate matters, community, public, and labor relations, politics, encroaching Socialism, and

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the most challenging of all problems—working with, through, and for human beings to get desirable and profitable results.

LOOKING back over those business activities, we find a fact that is all too often overlooked; not one of these problems can be solved until the human equation in it is effectively understood, predicted, and controlled.

The persons who take on these major problems involving people in this industry must be competent in the field of man-power management. What are the obstacles to putting together, expanding, developing, coordinating, and operating the team desired and needed to help run this big, new growing business? Here are some of the situations which must be met head-on, and overcome.

Because utilities are a closely regulated type of business, many capable managerial and technical persons desired cannot be sufficiently attracted by this industry. Many such competent people want the freedom that they erroneously believe can be found only in the better-known competitive, free enterprise type of operation. Some are in defense production and armament. Others are so completely married to their jobs through pensions, deferred compensation, bonus plans, and all that, that even a 50 per cent increase looks like it is not worth the price of relocation.

Many competent people aspire to higher salaries and wages than can be realized in the public utility industry. We cannot trade the so-called "security" of our industry for such reasonable aspirations for economic advancement. A good management man

comes high these days. If a \$75,000 man is offered a \$10,000 net raise to make him change, he can remind the party making the proposition that his services will cost about \$185,000 a year. Why? Because a \$10,000 actual rate raise in that bracket costs \$100,000! This raises the serious question: Is the government pricing executive incentive out of the market?

Most young engineers want more opportunity for diversification of work assignments than they believe they can get in the gas industry. As one young engineer said recently: "They put you in a semitechnical job and then forget you. If you're lucky, they 'discover' you after twenty years and you become a junior exec at a rate about that of a first-class steam fitter. Of course they may give you that bunk about being a top management man some day, but how many of these top management men are there anyway? About ten men in a 1,000-employee company. That's a hundred to one! No thanks. I'll make airplanes or open up a nice little machine shop for small parts subcontracts."

Too little has been done in the past in industry generally and in the utility field in particular to develop, broaden, and train men in the requirements of general business management. The general management function has suffered in consequence.

BUT not all of these unfortunate developments can be laid entirely at the door of any one person or group. Let's look at some of the historical facts of the utility industry that have contributed to these conditions we have enumerated:

War, hot and cold, for the past ten

THE GAS INDUSTRY'S MAN-POWER PROBLEMS

years, had to be figured in all the charts and profit-and-loss sheets. This war for men's hearts and minds is changing the world and it is changing it in a way that we must watch, with vigilance and determination and singleness of purpose. But all these facts are well known and are exemplified by the seizure of the steel mills, and other threats to the freedom of enterprise.

The utility world was long overshadowed, in a few glaring instances, by tough, close men with restricted vision, and little concern for the human beings who worked for them and backed their enterprises. Because of a few, many had to pay the price. The Holding Company Act, Federal government in the power field, the TVA's, the co-ops, the public need for a whipping boy, and so on; these were logical and historical results. It is another story well known, word for word.

The holding company managements performed most of the major management functions for the men in the operating companies. Because of this fact, there was limited opportunity for the operating personnel to learn about handling such management functions. Now these people, formerly heavily dependent, are faced with the proposition of managing and of operating a completely self-sustaining company and of making heavy decisions directly affecting its stockholders. In a

study of 9,000 business failures in 1950, 82 per cent of them could be traced to executive deficiencies.

In many utility companies the gas department was overshadowed by the larger activities of the electric operations. Some men in such circumstances were denied the opportunities of reaching the levels of general top management.

In the past it was almost inherent in the industry, because of low turnover and stability of employment, for some people to "go stale," to become complacent, to stop growing mentally, and to otherwise "wither on the vine" before the stimulus of a promotion or other major change came their way.

Advancing age overcame many and, as will be recalled, there was little employment of new blood during the depression years. Because of that situation understudies are short on experience, if you were fortunate enough to have provided for understudies.

There are, no doubt, other historical reasons: the regulatory nature of the business, some low-pay policies, timid public and customer relations policies, and so on, but it will suffice for our purposes to add only one more major reason, management's philosophy concerning people at work.

WHAT are the facts on gas utility company employment, hours,



Q "THE basic man-power problems of the gas industry, for the most part, arise from the shortage of qualified men to handle the expanded work. Many foremen and supervisors today were rank-and-file laborers yesterday. Many supervisors, superintendents, and managers today were in less responsible jobs last week."

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and wages today? We know that there are now some 117,600 employees in gas utility operations, and some 173,900 employees in combined electric and gas companies. This employment represents well over half of all employment in public utilities, excluding transportation and communication companies.

IN January, the average weekly hours of gas utility employees was 42.4. The average hourly earnings stood at \$1.67 and the average weekly earnings stood at \$70.89. After an average gas worker with three dependents paid his income taxes and Social Security, he had left about \$66.50, with security the most comforting thing in his future.

The number of manufactured gas utility employees has been steadily decreasing, 64,000 in 1934 and 44,400 in 1950. The number of gas utility company employees in so-called "mixed gas" work has been steadily decreasing from 11,500 employees in 1934 to 8,600 employees in 1950.

The number of natural gas utility employees has been steadily increasing, on the other hand, from 55,200 in 1934 to 121,500 in 1950 with a total annual payroll over \$425,000,000. The figures as of this moment are probably well over 135,000 employees and one-half billion dollars in payroll. With this tremendous growth in human assets, over 100 per cent, has come the need for more and better managers and supervisors. On the basis of a ratio of 20 to 1, a very conservative if not an unfortunate one, of employees to managers or supervisors, we have a figure of 6,750 managers. And to any man who has

looked for experienced managerial material to run his business, this figure is pretty overwhelming.

On this highly conservative basis, and with the present growth of natural gas operations continuing as it has, we shall need roughly 2,500 new supervisors within the next ten years. Now I don't know how long it takes to make a successful executive, but I am fairly sure that even the famed intensive program of the Harvard School of Business Administration cannot make one in thirteen weeks! Nor does Harvard set up the program for that purpose, its trainees being fairly successful long before they get to the school.

LET us turn now to some current man-power problems, the problems affecting man-power investment and budget. What are the problems involving people wanted to help run this expanding business?

All experienced graduate engineers are now employed, and usually at salary figures higher than many companies can meet. Some of these men have one job offer a week. These are "lush times" for the technically trained man, and he is learning to make the best of it.

About 30,000 new engineers will be needed each year by industry and by the government but less than half of that number will be graduated by our engineering colleges during the next five years.

Salesmen, competent sales people, went the way of a lot of other competency as a result of our war economy and the postwar need for "order takers" only. The "Death of a Salesman" resulted largely from two points

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Employment Appeal of Regulated Industry

"BECAUSE utilities are a closely regulated type of business, many capable managerial and technical persons desired cannot be sufficiently attracted by this industry. Many such competent people want the freedom that they erroneously believe can be found only in the better-known competitive, free enterprise type of operation."

of infection—the swivel chair and the telephone.

And office help: Because of the low birth rate during the depression years of the thirties there are not today enough young people of working age to do the many routine and limited tasks so necessary to successful business operations. Stenographers, clerks, accountants, and skilled office people are simply not available to meet all of our business requirements.

AND what does one have to pay most of those young people for a 40-hour week? Note that I did not say "work" week. Well, in Los Angeles the median average pay of a stenographer is about \$58; in Chicago it's \$55.50; in San Francisco it's \$59; in Atlanta it's \$48; in New York it's \$50. As these are *median figures*, 50 per cent are paid *more* than these amounts.

In addition to such pay, many companies have had to install elaborate fringe benefit plans, paid for in their

entirety by the company. There are such added attractions as retirement plans, Social Security, unemployment compensation, sick plans, hospitalization, surgery and medical plans, workmen's compensation, life insurance, health, accident, and disability insurance, survivors' and death benefits, long vacation periods, music while you work, lounges, libraries, employee publications, summer camps, rest homes, recreational grounds, clubs, athletic teams, company-provided transportation, restricted overtime or overtime allowances higher than those required by law, regular promotion by seniority schedules, new premium pay similar to the coming guaranteed annual wage, call-in pay, excused time when the thermometer reaches 90 degrees or when there is inclement weather, excused time for a death in the family even to the third and fourth degree of sanguine and in-law relation. And just the other day I saw in the New York papers an ad from some of our good friends in

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southern California in which they offered, as added inducement, their weather! The California way of life: Sun hat on head, tennis racquet in one hand, gorgeous blonde on the other, was a well-tanned Clark Gable engineer. I didn't see an ounce of *work* in the whole ad! What a life in LA! No wonder the nonscheduled airlines charge you *more to come out* than they do *to go back*!

AND about that week of work: What has happened in this country, particularly among many of our younger people, as regards the will to work? The coming of socialistic schemes and their attendant fallacies, "something for nothing" from the government, are fanning the fires of political control on all sides. Just the other day I read an editorial in one of the national labor papers in which the editor gave this neat twist to a phrase in our Constitution. "Our Constitution states clearly that our government is to provide for the common welfare."

Well, a company gets some of these people on its payroll and what then? For one thing, about two-thirds of all employees will belong to a labor union. Some companies have six or more such union groups among their employees. At least once a year management has to sit down across a table from one or more militant union agents, some of them not even employees, and attempt to negotiate a "collectively bargained" contract. This legal instrument governs, at a minimum, the pay of employees, how long they will work, and under what conditions. This negotiating business is the year-round work of those labor

people. It is their job, their work, their means of livelihood—depending solely upon getting something for their members who put them in their jobs.

The drive is on in many sections of the country to organize the white-collar worker. Isn't it something when engineers, professional people, consider it necessary to band together in a labor union to enforce their demands, to gain privileges, to redress grievances?

When these contracts are finally negotiated, the struggle is on to find ways and means of increasing the pay of those *outside* the unions. In both instances wage and salary stabilization formulas and regulations must be cleared.

DURING the past thirty years we have been developing a nation of specialists. Started late in the ill-conceived great leveling process of our educational system and perpetuated by the misinterpreted needs of business in general, we were told, many of us, to get ourselves a specialty. So today we have our specialists in accounting, statistics, auditing, personnel, and purchasing. As a result, and because of our ever-increasing needs, we are today being forced by hard circumstances and pressing needs to develop the generalists, the general manager, the vice presidents, and presidents. All too few companies have yet come to a planned approach in building management teams of the future.

We are having to start late in the careers of many of our employees to expand their knowledge, to widen their vision, to build new interests, and

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to capitalize on their usefulness in our businesses.

Perhaps if I have succeeded in confusing and momentarily discouraging the reader, it is only because I see that there is so much to be done to salvage our organizations from this somewhat uncertain future and from these oddly shaped forces which we have indicated.

First of all, I'll fall back in line with the popular inherent belief in employees and in the dignity of men. Without the full measure of that concept the industry will flounder on the shoals of a shoreless sea of trouble. The business cannot be run without good people.

HERE are some practical actions, as I see them, that can be taken to further the enterprise and to strengthen industry organizations:

1. *A survey of organizational structure periodically* to be sure that jobs, or positions, are properly related and are needed. The lines of authority and responsibility must be accepted and clearly understood by all concerned and not just in some manual or other.

2. *Written statements of company policy collected under one cover*, made readily available to all supervisors and foremen, and thoroughly clarified for

them in management information conferences, are necessary if you expect uniformity of application.

3. *Positions must be properly classified and equitably paid.* The procedures of job evaluation which analyze and classify jobs and which determine compensation scales are the soundest methods known today for bringing order into this phase of the management relationship.

4. *A program for the continuous examination of incumbents of supervisory, administrative, and professional positions* must be instituted in order to be sure that men are keeping abreast and growing with the duty requirements of the jobs. This suggests steps to train further those who are not keeping pace and dropping those who cannot keep up. Ways of enlarging the scope of authority and responsibilities for those who can "make the grade" will encourage such men and make them part of the team.

5. *A survey of work assignments for employees* will utilize their training to the best advantage. Very few engineers think they are being used to full capacity!

6. *Planned programs of executive development* which inventory, analyze, evaluate, and give direction to the development of management men are the best tools and methods yet devised



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for assuring the growth factor of officers, executives, and middle-management people. A package program will not do the work. It takes study, custom-made plans, and top management participation.

7. *Planned, carefully conducted supervisory training conferences* which permit the maximum of individual participation and which encourage wholehearted execution of management policies and decisions comprise one, thorough, formal method of management development in supervisory ranks. Such a plan presupposes though, that all supervisors and foremen are capable of growth.

8. To help assure the long-range growth and success of the company, *carefully planned and executed cadet training programs* can help attract and retain competent engineers and other potential executive man power. The youngsters look for and expect good training programs in companies these days.

9. *New employees, particularly, need training in the skills, methods, and requirements of your operations.*

EXPERIENCED and transferred employees sometimes need retraining in the requirements of their jobs. For example, among those who have recently converted from manufactured to natural gas, what problems were encountered in, let us say, safe practices in the work of maintenance crews? Or what happened to men no longer needed in the manufacturing plants?

10. Some progressive managements are conducting *opinion and attitude surveys* among their employees. Some are using *testing and other selective*

techniques in the hiring and placement of employees as was so recently and competently reported by the American Gas Association's personnel committee. Others are engaging in extensive *recruitment* of executives through the help of outside organizations. Some are strengthening their *benefit plans and employee services*, and installing *executive health maintenance programs*.

11. *Clear channels of communications*, in an environment which permits and encourages the free flow of information up, down, and across the organization, are sponsored, planned, and developed by enlightened managements for the solution of a host of business problems.

12. *Adequate personnel records* are frequently required and few executives have secured the full value of their many uses.

13. *The application of merit rating or personal performance appraisal systems* can be helpful in judging the work of employees for compensation purposes and for other reasons, some of which are too often overlooked. For example, such a device can easily show the weaknesses and strengths of the employees for training or for promotion purposes.

14. *What is being done today in safety training of employees?* Safety valves, guards, periodic inspections, warning signs, interlocking devices, and so on are essential, but they are not enough. Slogans like "be careful," "work safely," "the life you save today may be your replacement tomorrow," "he who works the safest way lives to work another day," are fine words, but employees must think straight about hazards and unsafe acts

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and follow safe practices as a matter of work habit. Here again we find people as the weaker and complicated element in company operations. Their unsafe acts account for 88 per cent of all accidental injuries and at costs amounting to millions of dollars each year.

15. The circumstances under which the union leader successfully performs his job are worth remembering. Management should *prepare for negotiations* with at least as much care and forethought.

To assist in all of this detailed manpower management, if no qualified staff man is already on the job, a man grounded in the right philosophy of human relations should be obtained—one with some stature and a further capacity for growth, one trained in the methods of sound personnel administration, and one with the intestinal fortitude to stand up, in a persuasive way, to operating management, when it may be dead wrong. A truly professional and skilled manager of personnel can be a key man of the business organization. He can help it grow by helping its people to develop and to create a business team that *means* business.

Here is another problem we frequently encounter in utility companies which, it seems to me, is just plain "old hat" management. This problem has to do with organization for sound management. Time and again we encounter the situation where a company is laboring under the false management concept that, for example, a division manager can serve many masters and can do an operating job without clear-cut authority and re-

sponsibility over the various operations in his division. Sometimes this awkward arrangement is expressed like this: We want our division manager to be "Mr. Gas Company" to the people in his territory. We want him to concentrate on public relations, or maybe its sales, and, get this, he will be *nominally* in charge of all other company functions in his division. Now, we all know what happens when something goes "haywire" out in the division and just how quickly that "nominally in-charge angle" evaporates and the division manager is called "on the carpet."

THE true situation is too often this: The operations manager or general superintendent back in the home office has often had the "full" management authority and responsibility for all phases of distribution, the chief engineer has frequently been in charge of all construction throughout the properties, and the controller, or his equivalent, has been known to conduct his office as if he were personally responsible for every transaction and for every last penny changing hands in the business. The division manager supervises, and yet he doesn't supervise. He manages and yet he doesn't manage.

THE lodging of authority and responsibility in a few key men is the basic point at issue. A prevailing sense of responsibility in a few is only fairly good.

It undoubtedly represents an extension of the one-man responsibility in a one-man company, or in a three- or four-man company. Ralph Waldo Emerson said: "An institution is the

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lengthened shadow of one man." To that extent the lengthened shadow of a sense of responsibility to three or four others in management is good. But if a business has grown to where it needs divisions, departments, and

sections to run the various activities, why not lengthen the shadow to give the men who may be only "nominally" heading those organizational units the same sense of responsibility, interest, and enthusiasm as top management?

AGA 1952 CONVENTION TIMETABLE, ATLANTIC CITY, NEW JERSEY

Sunday, October 26th

1:00 p.m. Registration in lobby, Auditorium (till 5 p. m.).

Monday, October 27th

9:00 a.m. Registration in lobby, Auditorium (till 5 p. m.).
10:00 a.m. Joint Meeting, Natural and Manufactured Gas departments, Ballroom, Auditorium.
2:00 p.m. General Session, Ballroom, Auditorium.
9:00 p.m. President's reception, recreation, and dancing, Ballroom, Auditorium.

Tuesday, October 28th

9:00 a.m. Registration in lobby, Auditorium (till 5 p. m.).
10:00 a.m. General Session, Ballroom, Auditorium.
12:30 p.m. Home Service Round Table, buffet luncheon, Belvedere Room, Hotel Traymore; Industrial and Commercial Gas Section luncheon, Rose Room, Hotel Traymore; Accounting Section luncheon, Rutland Room, Haddon Hall; Corporate Secretaries luncheon, West Room, Haddon Hall; Rate Committee luncheon, Mandarin Room, Haddon Hall; Insurance Committee luncheon, Board Room, Claridge Hotel.
2:00 p.m. Residential Gas Section, Trimble Hall, Claridge Hotel. Operating Section, Renaissance Room, Ambassador Hotel. Personnel Session, Tower Room, Haddon Hall. Ladies' Party, Solarium and Music Room, Marlborough-Blenheim Hotel.
8:00 p.m. GAMA Exhibit Night, Auditorium.

Wednesday, October 29th

8:00 a.m. Home Service breakfast, American Dining Room, Traymore Hotel.
9:00 a.m. Registration in lobby, Auditorium (till 5 p. m.).
10:00 a.m. Joint Meeting, Industrial and Commercial Gas Section and Residential Gas Section, Trimble Hall, Claridge. Operating Section, Renaissance Room, Ambassador Hotel. Accounting Section, Viking Room, Haddon Hall. Accident Prevention Committee, Venetian Room, Ambassador Hotel.
2:00 p.m. Exposition Inspection, Auditorium.
9:00 p.m. Entertainment and dance, Ballroom, Auditorium.

Thursday, October 30th

9:00 a.m. Registration in lobby, Auditorium (till 5 p. m.).
10:00 a.m. General Session, Ballroom, Auditorium.
12:30 p.m. Accident Prevention Committee luncheon, Surf Room, Ambassador Hotel.
2:00 p.m. Operating Section, 22 Club, Ambassador Hotel.
9:00 p.m. Entertainment and dance (Gas Appliance Dealers Night), Ballroom, Auditorium.



A Public Relations Program For the Gas Utilities?

For some time leading figures in the gas industry have been considering the advisability of adopting an industry-wide public relations program. What the steps in that direction have been, and how the plan is currently shaping up, are ably described in this article.

By JOHN J. HASSETT*

THERE is a tide in the affairs of men, said wise old Will Shakespeare, which, taken at the flood, leads on to fortune. There are many men in the gas business today who feel that the tide of public opinion regarding their industry is nearing its crest, and that a nation-wide job of public relations engineering—including flood control, strengthening of dikes, diverting of streams, and creating public awareness—needs to be done now for the future success of the industry.

The gas business is more than a century old. Originally a local industry in character, and even today a local industry to its millions of customers, it has grown in complexity and capacity, until its apologists have gone goggle-eyed trying to explain it in words of four syllables or less.

Originally a manufacturing business, it has been converted by the magic of natural gas into a vast underground transit system, fed by bubbling springs, sometimes 2,000 miles distant.

Once its individual member company was an autonomous corporation, with its marketing area all staked out and waiting. It concerned itself only about its own little local problems of supply, raw materials, property, workers, revenue, and profits. Today it is still autonomous. But its sources of supply are frequently shared (and sometimes fought over) with a dozen companies across the nation. Its markets are still limited geographically, but otherwise are constantly expanding. Its problems now depend on factors over which it has little control.

THE business has become an extremely complicated one. Once

*For personal note, see "Pages with the Editors."

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independent company executives are now petitioners before commissions, while a whole new library of Federal utility law is written into the books. Company salesmen now study weather charts and hearing schedules before aiming at more diversified sales to maintain steady load factors the year around. And operating engineers, who used to be preoccupied with production, have become warehousemen struggling with an annual problem of too much supply in summer, too much demand in winter.

Yes, the industry is changing, with some part of a utility's "public" being affected by every change. It is probably fair to say that many relationships between a company and one of its "publics" have been altered by recent developments, without much thought having been given to what they might mean to both parties. That's only natural; even when a great deal of thought goes into a new move, its impact on those affected isn't always correctly anticipated.

There have been some grave public relations errors committed, however, mostly sins of omission. They have not been fatal, but they must not become chronic if the industry is to prosper.

The essence of a good public relations program is to do a good job, and then see to it that everybody hears about it. No one will deny that the industry has done and is doing a wonderful job. Many people do not know how good a job has been done, and there lies the heart of the problem.

WHAT are the things the public should know to appreciate the gas business properly? Resisting the

temptation to say "Everything!" we can settle on several basic premises. James F. Oates, Jr., chairman of The Peoples Gas Light & Coke Company in Chicago, wrapped them up like this in a speech at AGA's convention a year ago:

The question of a public relations program for the gas industry can be considered only in the light of such basic facts as:

1. Gas is distributed and sold to the public by public utilities whose business is affected with a public interest and therefore regulated. The business deals with large groups of individuals—the consumers, virtually the public itself; large groups of employees; and large groups of owners—the stockholders.

2. Our service fulfills the daily human needs of millions of individuals. In many areas of our land it is indispensable to health, comfort, welfare, and economic prosperity.

3. Our fuel is in great demand and in many places in short supply. The public's patience is growing thin. The public will not be denied service indefinitely.

4. Our fuel is competitive and we all know that competition is the lifeblood of free enterprise. A competitive product must be sold and appliances to use it must be sold.

5. Our fuel is the best fuel. Its service is a modern miracle. It is taken for granted by millions of people as is the very air we breathe. Back of it all lie vast plants, untold expenditures of human energy, and unceasing dedication to reliability and safety of service. Gas service must be kept safe and reliable and it must be believed by the public to be safe and reliable.

6. In a very real and vital sense, gas service, indeed the service of all utility companies, must be kept in private hands to save the capitalistic system. This means honest, efficient, and adequate service must be performed and recognized as such by the public.

A PUBLIC RELATIONS PROGRAM FOR THE GAS UTILITIES?

THE type of public relations program which could fill that order would be, first and foremost, one carried out at the local level by the individual company. Only a plan tailored to meet local needs could succeed.

The cornerstone of such a program would be the furnishing of first-class, responsible efficient service at the lowest rates consistent with good business principles. Preferably the company should operate an aggressive sales program of high-quality appliances, and it should strive to keep costs down and employee morale up constantly. The twin factors of excellent gas service—reliability and safety—must be preached steadily to both consumers and employees.

But service is only the cornerstone—it is not the entire building. A customer does not think of good service when he's asked to pay higher rates for gas. What can excellent service mean to a prospective home owner in a new subdivision built beyond the mains? The fact that gas makes a fine cooking fuel makes little impression on the man who wants to heat his home with gas—and cannot because of supply shortages.

No—service is fine, but the economic facts of life must be told and retold, before the customer's understanding of the company approaches the reasonable stage.

Some of these facts of economic life are so elementary they escape attention. Here's one sample: People simply do not realize that a utility, with a "monopoly" on gas service in a community, is actually engaged in competition with the electric company in the same town. Unless the company is a combination of both electric and gas, this struggle is vital, but it invariably is missed by the average customer.

THE consuming public does not understand the importance of the gas industry in the national economy. Despite the American Gas Association's placement of many articles on the unusual side of the business, the average American has little conception of the power in a molecule of natural gas. He does not realize the magnitude of the funds needed to keep the industry rolling, nor the opportunities for investment that its member companies present. He does not know he is getting the most amazing fuel bargain ever offered—a safe, clean, dependable, efficient fuel, with no fuss, bother, or effort—at prices competitive with fuels that cannot match its attributes.

In fact, nobody really knows how much the public knows, thinks it knows, or wants to know, about gas and those who sell it and service it.



Q "THERE are many men in the gas business today who feel that the tide of public opinion regarding their industry is nearing its crest, and that a nation-wide job of public relations engineering—including flood control, strengthening of dikes, diverting of streams, and creating public awareness—needs to be done now for the future success of the industry."

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So we have a starting point for our PR program—a determination of public attitudes on the industry, both locally and nationally. Surveys should be comprehensive and continuing—to help set up the goals of the program and to check on their accomplishments or failures.

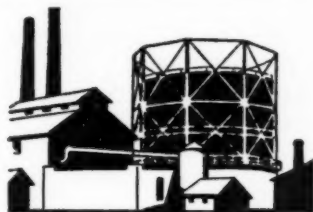
What else is needed? Facts. Acres of facts, compiled from existing material and sought from new statistical and economic probings. These facts can provide the meat for national news stories and feature articles, and can be used as comparisons for pinpointing a local situation. Just for example, let us pick a subject mentioned briefly before, and see how it could be given the PR treatment. What could a national program do for you—a local utility—if you were facing a rate case, and needed public opinion on your side to preserve your good relations with your community?

WELL, you could obtain a broadside of successful public relations techniques used by other utilities to win public acceptance of a proposed rate increase. You could study a mass of facts and figures on rate cases in other localities which might throw a constructive light on your company's proposal. You might use firsthand knowledge (via the aforementioned facts supplied from a central PR office) of the national gas supply situation. You can, in short, utilize much national material not now available, which would minimize the public's objections, if any, and would point up the soundness and reasonable nature of your own utility's local rate request. Suppose your company is offering a new stock issue, attempting to reach

local investors and attract new stockholders. Perhaps you have a new and different "public" you want to reach—your employees. This national PR program will have already supplied you with new and simplified basic economic data on the industry for your house organ. At your request, another broadside of case histories can be obtained to guide in the presentation of an employee education drive, perhaps leading to an employee-stockholder participation plan in which your company associates can buy a stake in their own future and security.

Meanwhile the general atmosphere of investor acceptance will have been improved by a major program at the national level. This program would encourage investment of funds in gas industry securities by distributing specially prepared industry material and background information to investors and financial publications. Increased contacts with investment bankers, stock exchange firms, and security analysts would also be a part of this program.

THESE examples are only samples of the programs that could be launched from a central headquarters if an all-around industry PR plan won the support of the industry. If these particular examples sound somewhat familiar, there is reason for it since they would follow similar programs now in operation for the oil industry and for the electric industry. Such programs would be an integral part of any national public relations operation. As a matter of fact, the gas industry a year ago established an AGA Public Relations Committee to work on and examine the feasibility of a national



Stepping Up AGA Public Relations

"THROUGH AGA, a broad base for public relations service and aid to gas utilities can be established that will develop within each community a comprehensive, tailor-made gas information program. Not until such programs are developed will this industry reap the public confidence it so richly deserves for services rendered."

program. This group, under the leadership of Ernest R. Acker, president, Central Hudson Gas & Electric Corporation, has held several meetings during the past year, and is convinced that the industry can and should launch a nation-wide program aimed at filling gaps in the current utilities' local and national PR efforts. The writer has limited knowledge of the actual trend of these deliberations, but it is known that in the not too distant future a carefully designed proposal will be forwarded by this group to member companies of the American Gas Association, and serious efforts will be made to obtain their support.

As a starting point, it can be conceded that the parallel PR programs of associated industries would be examined for application as solutions to common or related problems. In some instances, of course, the gas industry is likely to strike out on its own into

new fields of public relations. One of these fields is likely to be promotion of gas as an ideal fuel. Graphic demonstrations of its superior qualities as a fuel for home and industry can be expected. A greater emphasis on co-operation with educational institutions, both elementary and advanced, is another possibility.

THE general sentiment in the industry seems to be for a local program operating from a central headquarters. The logical location of such a nerve center is the industry's own organization—the AGA. The AGA committee has studied the effects and operations of the nation-wide PR effort recently launched by the Gas Appliance Manufacturers' Association, and found in them much that was commendable in advancing the utilization and public awareness of gas. The local angle, however, naturally is missing from such a program. Further refinement of the appliance PR tech-

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niques is in prospect for a utility program.

AGA already has the nucleus of a PR organization. Within its framework AGA now has a public information bureau, directing both publicity and publications. It has a promotion department and an advertising department, well financed through the so-called PAR (Promotion—Advertising—Research) plan. The industry is now doing a good job, publicity-wise, with homemakers, home economists, and science students. Commercial and industrial gas users are now contacted publicity- and promotion-wise with brochures, newsletters, articles, a speakers' bureau, and participation in national trade shows and expositions.

The gas industry already enjoys good relations with the government. Its services and product safety standards have been incorporated into Federal government specifications, and, together, business and government conduct research in many areas. AGA does a good job in keeping the industry itself informed on safety, on economic education, and on accounting activities. But, the surface has only been scratched, and the original exploratory efforts in this direction actually only open the door to myriad opportunities for improving relations in each possible contact area.

A VENTURE in public relations in which wide latitude of local expression is required can only work properly when its directors are men seasoned on the firing line of the industry. Here is where the know-how of a veteran, farsighted AGA committee with its eyes on the national picture but well aware of local pitfalls

and problems, can spell efficiency instead of confusion. For this reason, it is likely that the industry will prefer to run its own program, seeking outside counsel for guidance, spot checks, and special events. This decision again is deduced from the industry's attitude on problems that it has faced in the past. The gas business has never been a "Let George Do It" industry. When research was needed, when testing and inspection standards were sought, an already organized branch of the industry was given the job, rather than an outside agent. The PR proposals, when and if they are made, will not recommend "farming out" much of the work, and this is for the better.

At least one other topic likely to be included in any proposed PR program is a controversial one. It poses a question: How far should the industry as a whole go in opposing encroachment of government in the field of private enterprise? There is a school of thought that the gas business, though yet relatively untouched by creeping public enterprise, should stand shoulder to shoulder with the electric industry in opposition to socialistic schemes aimed at utilities. Another school clings to the belief that no one should "holler till he's hurt." A middle ground must be sought on this important issue.

IT is generally conceded that national institutional advertising of the free enterprise system has accomplished little. What is needed, instead of platitudinous boasts or impersonal sentimentality, is the establishment of a set of firm, clear principles to which every utility representative can point with pride. These should not be in-

A PUBLIC RELATIONS PROGRAM FOR THE GAS UTILITIES?

flammatory, but should affirm the public interest and concern with which each local company operates. Misinformation and vicious rumors should be laid to rest promptly. Facts, again, can confirm claims of sound operation in the public interest. Tax contributions of gas utilities play a major rôle in community and national appropriations, and these should be singled out in publicity. The efforts of this industry to conserve natural resources are a matter of public record and must not be overlooked. The enlightened movements of other industries to oppose new encroachments of government can be supported prudently and openly.

IN any such program, the potential threat to national supply lines of natural gas through Federal ownership of tidelands must be reckoned with and explained fully. Such recent new moves as the attempt of government to make pipelines common carriers when crossing public lands sound a warning that all must heed. Pending and proposed legislation, at the local level, should be scrutinized as carefully as AGA, INGAA, and other national groups watch national law-making operations.

FINALLY, a word must be said about the combination company. With national electric information programs under way in several important directions, the combination company has a responsibility to see to it that gas is not treated as a stepchild. In many such firms, more profit is made on electric operations, and more dollars are turned over, thus tending to direct a proportionate share of attention and care to electricity. Both deserve equal attention when it comes to service, reliability, and public interest, and this cuts across all phases of the public relations proposals discussed here.

This industry needs only the initiative and organization to take the facts known to each utility and knead them into workable masses of truthful, useful information that can convince people of its capacity for public service.

Through AGA, a broad base for public relations service and aid to gas utilities can be established that will develop within each community a comprehensive, tailor-made gas information program. Not until such programs are developed will this industry reap the public confidence it so richly deserves for services rendered.

“ONLY the regulatory commissions can give us the authority to restrict . . . sales of natural gas. Only the regulatory commissions can give us the authority to raise the price of natural gas to the consumer to more nearly the prices for coal and oil. The good old law of supply and demand does not function in the public utility business. It has been replaced by man-made theories of regulation which are solely in the hands of the regulatory commissions. Our regulatory commissions should give heed to this—and to the fact that the stockholders' earnings are being counted in depreciated dollars.”

—STUART M. CROCKER,
President, Columbia Gas System,
Inc.



Washington and the Utilities

New Rule for Gas Rate Cases?

NATURAL gas companies regulated by the Federal Power Commission, as well as their attorneys, are very much interested these days in a new rule proposed to be adopted for gas rate increase cases. Objections are being received up to November 21st, but unless changed or modified by the commission, it will go into effect after that time.

What the lawyers are concerned about is the possibility that the rule may limit the scope and content of rate case presentations to some extent. On the surface, of course, the rule simply specifies what data must accompany future rate increase tariff filings. The ostensible objective is to speed up procedures by requiring an adequate and uniform presentation of essential supporting case material. It does not, by its terms, limit any *additional* or other types of information or evidence which the applicant for an increase cares to submit. But cautious practitioners reason that the rule, by spelling out what the FPC deems to be essential, gives a pretty good indication of what is likely to be ignored or given slight consideration, if admitted.

Three "reform" features of the rule are attracting such notice as being possible steps in the direction of advanced enforcement of policy decisions through the adroit medium of a routine procedural rule.

First, there is the requirement that "test year" information be submitted to support proposed rate increases. While the "test year" standard has long been followed by the FPC, does the rule mean that the FPC will no longer consider any alternative "forecast" data? Utility counsel have argued that the "test year" requirement, to the exclusion of forecast

data, puts them in a hindsight strait jacket, unable to give evidence of well-known predictable cost increases which the utility will have to pay. "Test year" adherents contend that such forecast data are uncertain if not conjectural. Of course, it is a rule that could work two ways in a price-dropping period, but who can foresee that?

SECONDLY, the rule requires "cost of capital" information on debt, preferred and common, along with earnings-price ratios and other market data for the past five years — broken down into months for the previous year. This recalls the controversy over the Northern Natural Gas Company decision and recent insistence by Chairman Buchanan and Commissioner Smith that the FPC has not substantiated any new return standard for its traditional practice of basing return on property cost (as distinguished from stock market opinion).

The third "reform" is the requirement that the gas rate increase applicant be prepared to go on the hearing stand and prove its case as soon as the application is filed, even though the FPC may continue its practice of almost automatically suspending rate increases for the statutory 5-month period. Some gas companies have been criticized for trying to anticipate the "lag" by filing for rate increases which could not be justified at the time of filing. This practice apparently would be prevented by the proposed rule.

Incidentally, the U. S. Supreme Court recently denied a further review of a lower court ruling which would require the FPC to hold additional hearings on competitive pipeline applications for certificates to serve the New England area.

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The Third U. S. Circuit Court of Appeals had so ruled in the case of Northeastern Gas Transmission Company, whose objection to sharing the New England market with Algonquin Gas Transmission Company had been dismissed by the FPC.

Gas Men Hit FPC and OPS Rulings

THE Independent Natural Gas Association of America wants the Federal Power Commission to "promptly re-examine" the basis of its new rate return formula. Association members in a resolution said that the FPC has used the new rate formula in recent proceedings involving interstate pipeline companies.

The formula constitutes "a radical departure from prior rate-making principles" and impairs the gas industry's ability to attract new capital to finance expansion, the group stated.

The FPC formula, said the association, has caused a reduction in the market value of natural gas stocks. This indirectly will be harmful to the public interest because, if pipeline companies cannot expand, they cannot adequately service their areas, it said.

Association members cited the recent case involving the Northern Natural Gas Company in which the FPC gave a 5½ per cent return to Northern in place of the customary 6 per cent.

Charges that the Federal Power Commission has departed from its long-time practice of using the "net investment rate base" for determining natural gas pipeline rates were denied by FPC Chairman Thomas C. Buchanan, in an address to a New York analyst group, reviewed in "What Others Think," *post* page 734.

He said that recently concern has been expressed over FPC action taken with respect to three cases—the Northern Natural Gas, Colorado Interstate, and Mississippi River Fuel—and blamed it more on an "ill-considered" warning from an investment advisory service than on any change that has taken place in

the commission's own particular views.

Publication of the advisory service information did more to depress the natural gas stocks than did any action of the FPC, he stated. The commission, he declared, has never had any fixed pattern of determination but has examined each case on its own merits. There has been no deviation from a policy of granting 6 per cent return since there never was any such policy, he said. "It is not accurate to say the commission has one rate of return which it applies regardless of the facts of the case."

IN the first major natural gas rate case in 1940, the Natural Gas Pipeline Company was allowed a "reasonable" return of 6½ per cent. In 1945, he reported, Mississippi River Fuel Corporation was given a 6 per cent rate of return. Safe Harbor Water Power Corporation in 1946 was found to have a reasonable rate of return of 5 per cent.

He asserted that, broadly speaking, the net investment rate base which is still used consists of cost of properties used and useful in public service, less accrued depreciation, with a reasonable allowance for required working capital.

Moreover, he said, it is true that in reaching its conclusions the commission has emphasized the cost of capital concept specifically mentioned in the Hope Natural Gas Case, but "this is neither a new nor novel emphasis."

He added that "there was no warrant for the charge that the commission in the Northern Natural and other recent cases has departed from its long-time practice." Chairman Buchanan explained that over-all rate of return standing by itself does not mean very much in the analysis of common stock. The cost and quantity of senior capital must be taken into consideration, too.

Therefore, a 5½ per cent over-all return for Northern Natural Gas provided for 8.75 per cent on common stock. The common amounted to 44 per cent of total capital. "And I do not believe that 8.75 per cent on common equity of a utility of Northern's standing can be said to be unreasonably low."

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The 6 per cent found reasonable for Mississippi River Fuel contemplated 9.3 per cent on common and, in the Colorado Case, the 5½ per cent over-all return allowed 8.45 per cent for common equity.

Stockholder judgment often plays an important part in rate determination, he declared. If investors believe that for a given stock, a yield of 6 per cent and an earnings coverage of 9 per cent are required to call forth their capital, then the stock will generally sell on the basis which reflects these facts and that "is the best means of informing our judgment as to earnings and dividend requirements on common stock," he told the group.

General market sentiment also exerts an influence on rate making. A 6 per cent yield may be wholly adequate to attract investor capital at one time, whereas 5 per cent or 7 per cent may be required at other times, he explained.

While the commission goes to the market for information to base its rate decisions on, any attempts to make earnings support a given market value would be "putting the cart before the horse." Furthermore, he declared, such action would conceivably lead to widespread and unhealthy speculation.

EARLIER in its Omaha meeting, speakers at the INGA convention attacked attempts of the Office of Price Stabilization to control the price of natural gas. "The price which the gas producer receives for his product is an all-important factor in a sustained and ample supply," Russell B. Brown, general counsel of the Independent Petroleum Association of America, declared.

Mr. Brown told the Omaha meeting that "there is no need or justification" for price controls on natural gas.

"The going field price of gas is far below its intrinsic value," he asserted. "Under these circumstances, price controls become growth controls. Such artificial controls serve only to foster shortage."

Speaking on "The Viewpoint of the Independent Producer," Mr. Brown pointed out that only 6 cents out of every dollar the natural gas consumer pays

reaches the producer. Last year, gas producers received in the neighborhood of \$500,000,000. The sale of this amount of energy, had it been in the form of crude oil, would have returned more than \$3 billion for reinvestment and enlargement of supplies for the future.

The IPAA official added that "When the disparity between what is paid for the production of gas as compared with other energy resources becomes fully recognized, the problems of the producer, the transporter, the distributor, and the consumer will be resolved in a normal competitive economy."

Referring to the percentage depletion provision in Federal tax laws, Mr. Brown said as this provision becomes better understood, its acceptance becomes greater.

"There has been recent evidence," he pointed out, "through the report of the President's Materials Policy Commission (Paley Commission) that more of the administrative agencies may accept with approval its continuance."

Mr. Brown voiced concern of the continued threat of possible Federal control over the production of natural gas and referred to policy shifts by the Federal Power Commission in its interpretation of the commission's authority under the Natural Gas Act of 1938.

"The effect of the uncertainty as to how the law is to be interpreted is to confuse the producer of gas and to discourage aggressive gas-producing activities," he added. The serious effect on the consumer of gas is to deny or make uncertain a continued supply.

C. P. RATHER, president of Southern Natural Gas Company of Birmingham, Alabama, was elected president at the day-long convention on October 6th.

John F. Merriam of Northern Natural of Omaha was re-elected first vice president, and S. B. Irelan, president of Cities Service Gas Company of Bartlesville, Oklahoma, second vice president. The third vice president, a new officer, will be J. J. Hedrick, president of the Natural Gas Pipeline Company of America, Chicago.

Financial News and Comment

By OWEN ELY



Is the FPC Turning a Damper On Gas Expansion?

THE address of Chairman Buchanan before the New York Society of Security Analysts on October 8th drew a record crowd, and even with an "overflow" loud-speaker meeting on another floor not all could be accommodated. (See further review in "What Others Think," page 734.) This reflected the widespread interest in FPC regulation of the natural gas industry, following the recent decisions in the Northern Natural Gas and Colorado Interstate Gas cases, which were publicized as very adverse to the industry by Standard & Poor's. In these cases the commission had used the so-called "cost of money" basis for determining fair rate of return on the rate base.

The opinion in the Northern Natural Gas Case was handed down June 11th. The company had sought a return of 6

per cent but the FPC staff held that it should not exceed $5\frac{1}{2}$ per cent, and the commission sustained the staff. The company is one of the conservatively capitalized gas companies, with a 44 per cent common stock equity at the end of 1950. Its bonds had been sold to the public at the very low average interest cost of 2.55 per cent, including the expense of flotation. The FPC determined the cost of common stock money by using average earnings-price ratios for selected natural gas stocks (considered comparable to Northern) for a period of years from 1946 to the time when the hearings ended in 1951. This figure worked out at 8.1 per cent as an average for seven stocks, or 8.5 per cent as an average for four. The commission allowed 8.75 per cent and added .50 per cent to cover flotation costs, making 9.25 per cent. The two money costs were then weighted by the respective percentages of bonds and common stock outstanding, the over-all cost being 5.50 per cent.

A SOMEWHAT similar method was followed in the Colorado Interstate Gas Case, decided August 11th, in which the commission ordered the company to reduce wholesale rates by \$3,111,000. While the company had contended for a rate of return of $6\frac{1}{2}$ per cent, the commission allowed only $5\frac{3}{4}$ per cent and also maintained that 5 per cent would have been adequate.

In his talk before the analysts, Chairman Buchanan held that these decisions

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did not indicate a new departure in regulatory thinking or policy, but followed "the standard of the Brandeis dissent in the Southwestern Bell Case [PUR1923C 193], and the decisions in the Bluefield Water Case [PUR1923D 11], and the Hope Natural Gas Case [51 PUR NS 193], ranging from the early 1920's to 1943. . . . In the first major natural gas rate case, Natural Gas Pipeline Company of America, decided in 1940 [35 PUR NS 41], the rate of return found reasonable was 6½ per cent. In the Mississippi River Fuel Corporation Case, decided in 1945 [63 PUR NS 89], 6 per cent was found reasonable. In the Safe Harbor Water Power Corporation proceeding, 1936, which was an electric utility rate case, 5 per cent was found appropriate. In the recent Colorado Interstate Natural Gas Company opinion, issued August 8, 1952, 5½ per cent was allowed, in the Mississippi River Fuel Corporation opinion, issued August 4, 1952, 6 per cent was found reasonable, and in the Northern Natural opinion, issued June 11, 1952, 5½ per cent was allowed."

THE Supreme Court in the Bluefield Case (decided about thirty years ago) stated that "the return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." In the

Hope Natural Gas Case, the court stated:

From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. . . . By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital. . . .

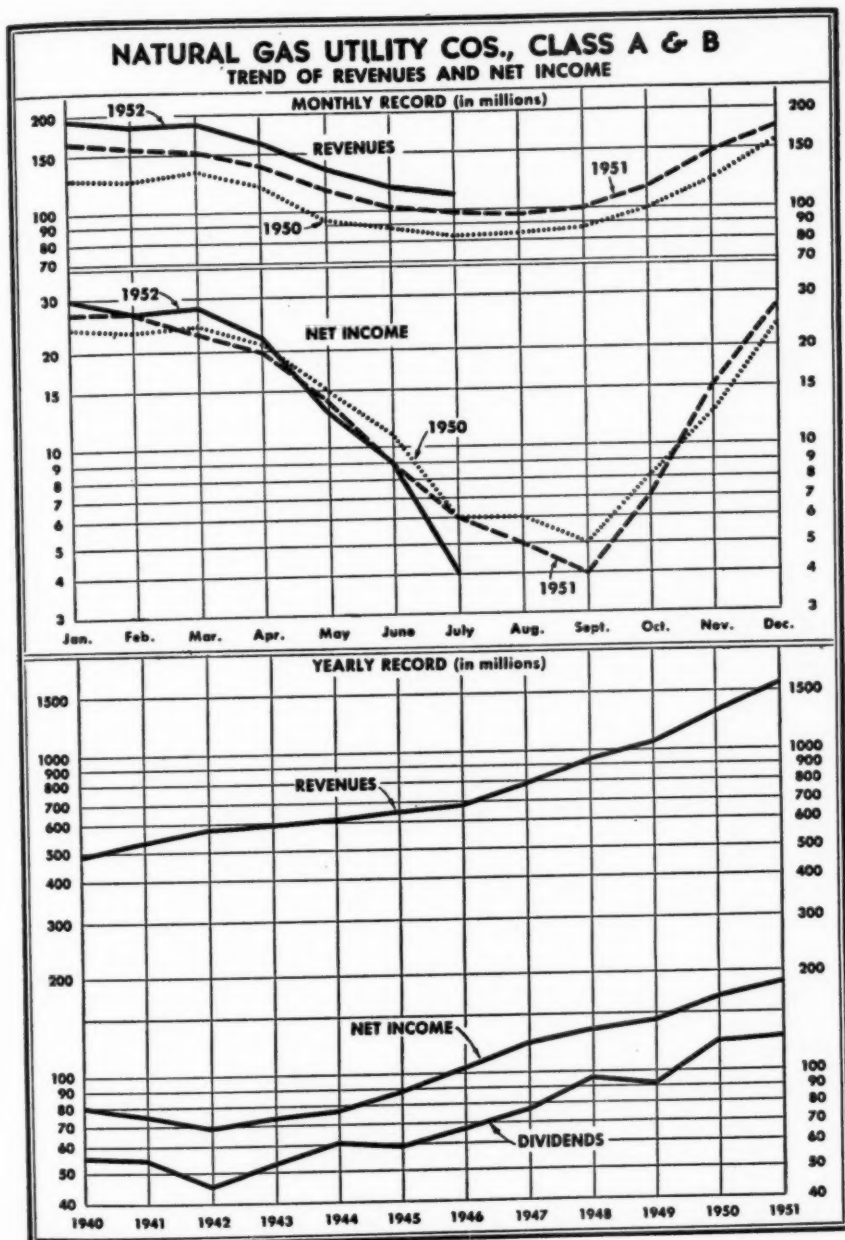
The Supreme Court did not specify just how the "capital costs" method should be applied. It merely indicated the general objective as to maintaining credit and attracting capital. This is a sound and essential regulatory policy, especially in the present period when the gas industry is engaged in the largest construction program in its history, with a correspondingly heavy volume of financing. But it appears to many Wall Street observers that the Federal Power Commission has paid only perfunctory attention to the Supreme Court objective of "attracting capital" and that its recent decisions may have the opposite effect of making it more difficult for the industry to finance.

IN the first place, it would seem that the commission has placed undue

CURRENT YIELD YARDSTICKS

	Recent	1952 High	Range Low	1951 High	Range Low
U. S. Long-term Bonds—Taxable	2.75%	2.77%	2.56%	2.74%	2.39%
Utility Bonds—Aaa	3.04	3.08	2.93	3.09	2.64
—Aa	3.08	3.11	2.99	3.18	2.70
—A	3.25	3.31	3.21	3.32	2.82
—Baa	3.51	3.58	3.49	3.58	3.21
Utility Preferred Stocks—High-grade	4.08	4.24	3.94	4.25	3.77
—Medium-grade	4.46	4.71	4.33	4.71	4.19
Utility Common Stocks	5.38	5.59	5.27	6.14	5.62

Latest available Moody indices are used for utility bonds and preferred stocks; Standard & Poor's indices for government bonds and utility common stocks.



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weight on *past* costs of financing and has not given sufficient weight to *present* costs. It is well known that interest rates (1) were formerly abnormally low due to the government's desire to finance its debt at a minimum cost, and (2) that they are now in an uptrend. It seems quite doubtful whether any gas company will ever again be able to obtain mortgage money on a 2.55 per cent basis. As indicated in the accompanying table of "Current Yield Yardsticks" (page 726), bonds rated Aaa by Moody's have been selling recently to yield 3.04 per cent, and it is usually necessary to allow a "spread" of .10 or .20 per cent for a new issue as compared with an old. The latest Aaa bonds offered were the Duquesne Light Company 1st 3½s of 1982, which were sold by the company to the offering syndicate at approximately 102. Thus it seems ridiculous to talk about the cost of mortgage money approximating 2½ per cent. While the historical cost must be recognized, at least equal weight should be given to current cost.

It is interesting to note that even the largest of the new pipeline companies, Texas Eastern Transmission Company, recently had to pay 4 per cent on \$30,000,000 first mortgage bonds, with a rather early maturity (1967), sold to a group of institutional investors; and the company had to pay 5½ per cent on \$19,000,000 preferred stock sold to the public. These rates compared with some earlier costs of 3½ per cent on \$78,000,000 bonds due 1970, and 4½ per cent on a convertible preferred stock issue of about \$20,000,000.

BUT in this case the company had to contend with other adverse factors besides the rise in interest rates. In its prospectus covering the preferred stock issue, it had to append a footnote to its earnings statement (page 7) as follows:

See the section Rate Increase Application and Rates for information relating to (i) the company's filing of rate schedules calling for increased rates and the suspension by the Federal Power Commission of such rate sched-

ules, and (ii) the adverse effect on the company's earnings which will result during the period of the suspension and which will result thereafter to the extent that such increased rates as ultimately permitted to become finally effective do not fully reflect increased costs and expenses.

On page 20 the prospectus further stated:

The new rate schedules are based on an allowance for a return of 6½ per cent on the company's estimated net rate base. Reference is made to the section Regulation for information with respect to the allowance by the commission of rates of return of only 6 per cent in most of the recent instances and of only 5½ per cent in an opinion dated June 11, 1952. . . . The company expects that the commission's action in suspending the proposed rates and deferring use thereof will result in a substantial adverse effect on the company's earnings for the months of August, September, and October, 1952, unless such suspension is earlier terminated.

IN the second place, the Federal Power Commission is using two statistical bases not clearly related. In arriving at the cost of common stock money it has apparently leaned heavily on average historical price-earnings ratios, or the relation of market prices to earnings. Then it has applied the resulting cost of common stock money (after combining it with cost of senior money on a weighted basis) to an *original cost* rate base. While original cost means net plant cost plus working capital, the corresponding figures on the other side of the balance sheet are the par value of the senior capital and the *book value* of the common stock.

But it is a well-known fact that, for various reasons which need not be elaborated here, most utility common stocks are selling at a substantial premium over their book values. In the case of electric utility stocks, Vice President Lyles of First Boston Corporation (see previous

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issue of the *FORTNIGHTLY*, page 553) has calculated the average premium to be 37 per cent. The premium is probably larger for some of the new natural gas pipeline stocks; thus for Texas Eastern it approximated 70 per cent earlier in the year and is currently estimated at around 40 per cent.

For convenience let us assume that natural gas stocks have been selling recently at market prices averaging 50 per cent over book value. Thus, if the cost of common stock money was found to approximate 9 per cent (about the rate found in the Northern Natural Gas Case), it is obvious that this rate would produce earnings equal to only 6 per cent when applied to book value, since the latter amount is only two-thirds as much as market price. On this basis the total "cost of money" would be arbitrarily scaled down by roughly one-quarter, after allowance for the cost of bond money. This example is merely given for illustrative purposes only, and does not imply that the commission would get so far out of line.

MR. BUCHANAN stated, "I would not want to leave you with the impression, however, that the determination of rate of return is merely a mathematical computation. It involves the weighing of evidence, some of which might be quite contradictory. It requires the assembly of pertinent facts into supportable conclusions, which, in the judgment of regulatory commissions, gives a fair and reasonable return according to the record of the case. In addition, the determination of the commission is subject to judicial review."

In connection with the latter point, it may be noted that Moody's Utility Service reported on October 1st that the FPC had asked the U. S. Circuit Court of Appeals to vacate an order staying the \$3,111,187 annual rate reduction of Colorado Interstate Gas Company; attorneys for the FPC contended that the court lacked jurisdiction until the company had filed a petition for review and exhausted administrative remedies. Yet on October 4th the same service reported

that the FPC had denied the company's application for a rehearing.

In summary, it may be said that Chairman Buchanan's talk, and his replies to written questions propounded by the analysts, did not seem to dissipate the apprehension with which Wall Street has interpreted the latest FPC rulings. It is to be hoped that in the near future Congress, the courts, or the FPC itself will find means to clarify the regulatory issue, and also to speed up the regulatory process, in order to stabilize the earnings of the gas companies and prevent the construction and finance programs from being jeopardized or consumers deprived of desired services.

Tax Savings from Accelerated Amortization Should Be Explained

SHELLY PIERCE, financial editor of the *Journal of Commerce*, recently published a story in that paper under the 4-column headline "Rapid Write Offs Seen Distorting Utility Net." Such a headline seems a little disturbing and bearish. Pointing out that the electric utilities had enjoyed a good August, he said "the question has been raised as to how much of the improvement in income statements was due to accelerated amortization of emergency facilities on which certificates of necessity have been granted. Because of the many practices which are being used by the utilities in handling the accelerated amortization, comparisons with a year ago are said to have become valueless."

Obviously, the electric utilities should be careful not to let the impression become widespread that their earnings figures are "distorted" or "padded." Certainly this would not be true for the utilities as a whole, since accelerated amortization has only recently begun to appear in a small way in some of the individual interim statements. While such questions already have been discussed in this department several times,¹ it may be

¹ September 11 and February 28, 1952, and December 20, September 13, and August 2, 1951.

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worth while to recapitulate as to the various methods which may be followed:
I. *Should the saving be shown in the income statement?*

The probable intent of Congress in permitting accelerated amortization was to aid the companies in financing their construction programs. It may also be assumed that when the defense program tapers off, tax rates will be lower. For these reasons some utilities which have freedom of choice may feel justified in showing the savings in their income statements. This raises the following questions:

a. *Where should the saving be located?*

(1) It may be shown as a credit following the regular income tax item (as in the American Gas & Electric income statement) which seems the most logical position. However, this may raise the question as to whether the item would affect the earned rate of return on the rate base.

(2) It may be shown as a "special tax adjustment" following net income, with net income stated "before" and "after" (as done by West Penn Electric).

b. *Should it be included in share earnings?*

(1) If so, it should be clearly explained, preferably in the income account itself, but at least in a footnote, in order to avoid the charge that earnings are "distorted."

(2) Perhaps a better method is to show share earnings "before" and "after."

(3) In any event, it should be indicated whether the saving is considered available for dividends.

II. *The saving may be placed in a special reserve, as done by Consumers Power Company.*

But interim statements of the latter company merely refer in a footnote to the order of the Michigan Public Service Commission, without indicating what is done with the saving; a more detailed explanation would seem worth while.

The stockholder and the analyst naturally want to know how much benefit the company is currently obtaining from tax savings since in a strict or technical sense the amount saved represents borrowing from the future. Companies which reported large tax depreciation in the 1920's and 1930's (as compared with the amounts reported to stockholders) also gave an artificial fillip to share earnings—but now they may have to pay higher taxes because a large part of the property has been written off on the Treasury books.

Full information to stockholders is particularly essential when the company is paying, or plans to pay, cash dividends which are partially or entirely free from current income tax payments. Such dividends can, of course, only be paid in cases where a company has already written down its earned surplus (on its income tax books) close to zero, as otherwise the failure to earn the dividend currently after deducting accelerated amortization would be made up by earned surplus. At present only a few companies are in this class (Southwestern Public Service, Washington Water Power, etc.) but other cases may develop as larger allowances for amortization go into effect.

THE Irving Trust Company about September 29th held a conference with twelve utility analysts to obtain their views on these questions. A special bulletin was issued by the bank, from which we quote as follows:

The analysts first of all want to know whether or not a company is going to use the certificates of accelerated amortization. If so, most of them would like to receive a special release explaining the company's policy, at the time it is established. A new bulletin need not be prepared each time a new certificate is issued on the additional properties. However, they would like to be kept informed of current happenings through the annual and the quarterly reports. They would like to see included in the initial bulletin opinions of your state regulatory authorities on

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these matters—either the order or a summary of the order.

The analysts are concerned with the accounting procedure you will use and how it will affect each income statement and balance sheet. On the income statement they want to know how the tax reduction will be handled and what the amount will be each year. As to the balance sheet, will the tax reduction be carried to surplus or to a reserve, and will you establish or accept any restrictions thereon? . . .

The twelve analysts were asked how they would handle the amount of the tax reduction in the earnings-per-share figure when calculating earnings-price ratios. The majority generally will give consideration to earnings-per-share figures, both including and excluding it, but the tendency is to give more weight to the earnings excluding the reduced tax. Only three will entirely exclude any benefits of the tax reduction in their analyses.

The additional income which results from the tax reduction can be included in the balance sheet under a variety of headings, such as reserve for deferred taxes or as segregated surplus not available for dividends. This may have an effect on capital structure ratios. When calculating capital structure ratios, the analysts are in agreement that they will include it with the common stock and surplus if it is reported as segregated surplus. However, the majority will not include the accumulated tax reduction item with common stock and surplus if it is reported as a special reserve for deferred taxes.

Copies of the bulletin containing additional details may be obtained from John Childs, assistant vice president of Irving Trust Company, One Wall Street.

SEC Gets Cold Eye from "Public Plants"

THE plans of the Securities and Exchange Commission for § 30 of the Holding Company Act are beginning

to worry public power and gas groups. This comes as a result of the recent suggestions made by SEC Chairman Cook that his public utilities division might utilize that section to carry on a study of gas and electric utility system operations, now that the holding company reorganization work (under § 11) is drawing to a close.

In his original discussion, before a public utility seminar in Ann Arbor, Michigan (subsequently carried as a signed article in *PUBLIC UTILITIES FORTNIGHTLY*, September 11, 1952, issue), Cook pointed out that the SEC staff could use § 30 as a basis for making helpful recommendations as to the further integration of gas and electric system operations. This would be done in the interest of efficiency, economy, etc., and he suggested that it might also embrace possibilities of integrating publicly and privately owned properties.

The American Public Power Association was not enthusiastic at all. The association's magazine, *Public Power*, editorially questioned any Federal attempt to influence the consolidation, or even interconnection, of public and private operations in the interest of local efficiency or otherwise. In a subsequent meeting between the head of the association and Chairman Cook, the latter took pains to point out that such staff recommendations would be purely advisory and could in no sense interfere with or influence the operation of a publicly owned system.

Criticism continues and has even extended to Rural Electrification Administration co-op circles. But it is not certain just what kind of safeguards, if any, the public power groups could demand as a protection against SEC intervention concerning municipal gas and electric plants or co-op operations.

Public power groups (including co-ops) may be vulnerable to some extent, especially a number of small municipal plants, to recommendations that they be merged with local system operations from the standpoint of efficiency and economic operation. The same is doubtless true of a number of co-op operations.

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RECENT FINANCIAL DATA ON GAS COMPANY STOCKS

1951 Rev. (Mill.)		10/8/52 Price About	Indi- cated Divi- dend Rate	Appros. Yield	Share Earnings* — Cur- rent Period	% In- crease	12 Mos. Ended	Price- Earn- Ratio	Div. Pay- out
<i>Pipelines</i>									
\$30	S	Mississippi Riv. Fuel	35	\$2.20	6.3%	\$3.23	D1	June	10.8 68%
47	S	Southern Nat. Gas	50	2.80	5.6	4.61	D1	June	10.8 61
76	O	Tenn. Gas Trans.	22½	1.40	6.2	1.78	3	June	12.6 79
84	O	Texas East. Trans.	17	1.00	5.9	1.76	D2	Dec.	9.7 57
40	O	Texas Gas Trans.	17	1.00	5.9	1.49	D29	June	11.4 67
39	O	Transcontinental Gas	20	1.40	7.0	1.29	61	June	15.5 109
		Averages			6.2%				11.8
<i>Integrated Companies</i>									
98	S	American Natural Gas ..	31	\$1.80	5.8%	\$2.51	6	June	12.4 72%
188	S	Columbia Gas System	14	.90	6.4	.87	D23	June	16.1 103
8	C	Consol. Gas Util.	14	.75	5.4	1.42	D10	July	9.9 53
159	S	Consol. Nat. Gas	54	2.50	4.6	4.79	D5	June	11.3 52
62	S	El Paso Nat. Gas	33	1.60	4.8	2.85	4	July	11.6 56
27	S	Equitable Gas	21	1.30	6.2	1.88	2	June	11.2 69
13	O	Interstate Nat. Gas	39	2.50	6.4	3.27	1	Dec.	11.9 76
59	C	Lone Star Gas	26	1.40	5.4	1.57	D17	June	16.6 89
11	O	Mountain Fuel Supply ..	20	.80	4.0	1.15	16	Dec.	17.4 70
42	C	National Fuel Gas	14	.80	5.7	1.29	1	June	10.9 62
40	S	Northern Nat. Gas	38	1.80	4.7	2.62	17	June	14.5 69
25	C	Oklahoma Nat. Gas	35	2.00	5.7	2.66	D12	July	13.2 75
52	S	Panhandle East. P. L. ..	73	2.00	2.7	3.87	36	June	— 52
8	O	Pennsylvania Gas	17	.80	4.7	1.81	20	Dec.	9.4 44
92	S	Peoples Gas Lt. & Coke ..	136	6.00	4.4	9.99	9	June	13.6 60
17	O	Southern Union Gas	20	.80	4.0	1.06	D30	Dec.	18.9 76
3	O	Southwest Nat. Gas	8	.20	2.5	.62	51	June	— 32
126	S	United Gas Corp.	26	1.25	4.8	1.39	D14	June	18.7 72
		Averages			4.9%				13.0
<i>Retail Distributors</i>									
25	O	Atlanta Gas Light	21	\$1.20	5.7%	\$1.78	D11	June	11.8 67%
44	S	Brooklyn Union Gas	26	1.50	5.8	2.45	2	June	10.6 61
3	O	Consumers Gas	26	1.00	3.8	1.47	31	Dec.	17.7 68
2	O	Chattanooga Gas	5	—	—	.30	30	June	16.7 —
2	O	Fall River Gas Works ..	33	1.00	3.0	1.65	10	July	20.0 60
5	O	Hartford Gas	37	2.00	5.4	2.39	D11	Dec.	15.5 84
1	O	Haverhill Gas Lt.	35	1.85	5.3	2.13	7	Aug.	16.4 87
9	O	Houston Nat. Gas	19	.80	4.2	1.22	NC	May	15.6 66
1	O	Jacksonville Gas	37	1.40	3.8	2.37	D52	Dec.	15.6 59
5	C	Kings County Ltg.	10	.60	6.0	.89	59	June	11.2 67
29	S	Laclede Gas	9	.50	5.6	.73	D17	Aug.	12.3 68
19	O	Minneapolis Gas	23	1.10	4.8	1.32	D5	June	17.4 83
6	O	Mobile Gas Service	30	1.80	6.0	3.18	5	June	9.4 57
5	O	New Haven Gas Lt.	28	1.60	5.7	1.53	D20	Dec.	18.3 105
4	O	North Shore Gas	52	3.40	6.5	3.76	4	June	13.8 90
124	S	Pacific Lighting	52	3.00	5.8	4.02	D1	June	12.9 75
11	O	Portland Gas & Coke	19	.80	4.2	1.85	10	June	10.3 43
2	C	Rio Grande Valley Gas ..	24	.10	4.0	.19	—	Dec.	13.2 63
5	O	Seattle Gas	17	.80	4.7	1.21	D12	June	14.0 66
5	O	So. Jersey Gas	16	.50	3.1	1.01	53	June	15.8 50
2	O	So. Atlantic Gas	11	.70	6.4	.93	D19	Dec.	11.8 75
5	O	Springfield Gas Light ...	31	1.60	5.2	1.63	—	Dec.	19.0 98
19	S	United Gas Improv.	33	1.55	4.7	2.01	D5	June	16.4 77
27	S	Wash. Gas Light	32	1.80	5.6	2.42	D10	June	13.2 74
3	O	West Ohio Gas	16	.80	5.0	1.01	23	Mar.	15.8 79
		Averages			5.1%				14.4
<i>Canadian</i>									
14	S	International Util.	29	\$1.40	4.8%	\$1.93	28	June	15.0 73%

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RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER COMPANIES

1951 Rev. (Mil.)		10/8/52 Price About	Indi- cated Divi- dend Rate	Approx. Yield	— Share Earnings* —			Price- Earnings Ratio	Div. Pay- out
Communications Companies									
Bell System									
\$3,369	S	Am. Tel. & Tel. (Cons.)	153	\$9.00	5.9%	\$11.45	D11%	May	13.4 79
28	O	Cinn. & Sub. Bell Tel. . .	74	4.50	6.1	4.56	D1	Dec.	16.2 99
106	C	Mountain Sts. T. & T. . .	103	6.00	5.8	5.67	D2	June	18.2 106
203	C	New England Tel.	110	8.00	7.3	6.90	D7	June	15.9 116
478	S	Pacific Tel. & Tel.	113	7.00	6.2	8.07**	D5	Aug.	14.0 87
62	O	So. New Eng. Tel.	34	1.80	5.3	1.88	D11	Dec.	18.1 96
Averages					6.1%				16.0
Independents									
9	O	Central Telephone	12	\$.80	6.7%	\$1.26	7%	June	9.5 63
85	S	General Telephone	33	2.00	6.1	3.42	43	Aug.	9.6 58
11	C	Peninsular Tel.	44	2.50	5.7	3.54	D6	June	12.4 71
13	O	Rochester Tel.	14	.80	5.7	1.45	2	June	9.7 55
Transit Companies									
14	O	Cinn. St. Ry.	8	\$.25	3.1%	\$.32	68%	Dec.	— 94
9	O	Dallas Ry. & Term.	13½	1.40	10.4	2.46	40	Dec.	5.5 57
227	S	Greyhound Corp.	12	1.00	8.3	1.25	2	June	9.6 80
22	O	Los Angeles Transit	9	.50	5.6	.70	55	Dec.	11.4 63
31	S	Nat. City Lines	12	1.00	8.3	1.91	—	Dec.	6.3 52
73	O	Philadelphia Transit	5	.80xx	xx	.58	—	Mar.	8.6 138
7	O	Rochester Transit	4	—	—	1.12	—	Dec.	3.6 —
26	O	St. Louis P. S. A	11	1.00	9.1	.35	D15	Dec.	— 286
4	O	Syracuse Transit	17	2.00	11.8	1.75	D40	Dec.	9.7 116
24	O	United Transit	2	—	—	.91	1	Aug.	— —
Averages					8.1%				7.8
Water Companies									
Holding Companies									
26	S	Amer. Water Works	9	\$.50	5.6%	\$.67	D39%	June	13.4 75
4	O	N. Y. Water Service	45	.80	1.8	1.90	D12	June	23.7 42
Operating Companies									
3	O	Bridgeport Hydraulic	29	\$1.60	5.5%	\$1.74	20%	Dec.	16.7 92
8	O	Calif. Water Serv.	31	2.00	6.5	2.41	44	July	12.9 83
2	O	Elizabethtown Water	87	5.00	5.7	5.74	D18	Dec.	15.2 87
6	S	Hackensack Water	33	1.70	5.2	2.56	D6	Dec.	12.9 66
3	O	Jamaica Water Supply	27	1.50	5.6	2.65	13	June	10.2 57
3	O	New Haven Water	54	3.00	5.6	2.91	D10	Dec.	18.6 103
1	O	Ohio Water Service	23	1.50	6.5	1.78	D14	June	12.9 84
5	O	Phila. & Sub. Water	48	1.00x	2.1	4.69	61	Dec.	10.2 21
1	O	Plainfield Union Wt.	53	3.00	5.7	4.09	D2	Dec.	13.0 73
2	O	San Jose Water	33	2.00	6.1	2.44	D4	June	13.5 82
6	O	Scranton-Spring Brook	14	.90	6.4	1.20	20	June	11.7 75
3	O	Southern Cal. Water	10	.65	6.5	.70	D22	June	14.3 93
3	O	West Va. Water Serv.	31	1.20	3.9	1.30	2	June	— 92
Averages					5.5%				13.5

C—Curb exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. D—Deficit. *Earnings are calculated on present number of shares outstanding, except as otherwise indicated. **On average shares outstanding. PF—*Pro forma*. x—Stock dividend also paid in 1951. NC—Not comparable. xx—In the six months ended June 30, 1952, the company reported a deficit—consequently it is unlikely that the 80-cent dividend will be maintained.



What Others Think

FPC Members Speak Up—On Gas Regulation



IT is no longer any secret that there is increasing concern in the natural gas industry over restrictive regulatory policies of the Federal Power Commission. Recently, the commission refused to make any change in its limited rate increase for the Northern Natural Gas Company. Northern had asked the commission to reconsider a July decision that cut a requested \$10,000,000 rate increase to \$3,000,000. It also asked FPC to review its June decision, which reduced Northern's rate boost proposals from \$9,300,000 to \$5,100,000. These natural gas decisions were responsible for creating considerable concern among investment circles in New York city and elsewhere over the future of regulated pipeline company earnings.

The apparent adoption of a "cost of money" theory as a major factor in determining the natural gas industry rate structure has been widely regarded as the basis for the market weakness in natural gas securities. The FPC approach was seen to have the effect of allowing only reimbursement for the cost of debt capital and the cost of so-called equity capital as the basis for a return. The rate of return was limited to 5½ per cent on a "cost of money" basis in the recent Colorado Interstate Gas Company Case, and 5½ per cent in the Northern Natural Gas Company Case. Both cases will probably be appealed. There was some expectation that the industry might organize a "task force," or some other special group, to study the possibilities of prompt remedial action—regulatory or legislative, as the situation warrants.

BY coincidence, two members of the Federal Power Commission recently addressed themselves to natural gas

regulatory problems before different forums. Speaking before the New York Society of Security Analysts in early October, FPC Chairman Thomas C. Buchanan insisted that the commission has not forsaken the principle of over-all return on property in determining rates for interstate natural gas pipelines and denied that consideration of "cost of capital" in rate cases is a departure from practice. He blamed recent weaknesses in gas securities on an investment advisory service publication, which he said did more to depress stocks than any action of the commission. According to Buchanan, "there has been little change in commission policy in respect to the determination of rate of return through the years the commission has had jurisdiction over public utility rates." He continued:

It is well known that the Federal Power Commission in determining just and reasonable rates employs what is called a net investment rate base. Broadly speaking, the net investment rate base consists of costs of properties used and useful in the public service, less accrued depreciation, with a reasonable allowance for required working capital. The commission has used this method in all except its interim order in the Natural Gas Pipeline rate case, 1940, and the method was fully sustained by the Supreme Court in the Hope Natural Gas Company Case and other proceedings. The method is used widely throughout the United States, being employed by more commissions than any other rate base method.

THE FPC chairman admitted that the commission has emphasized the "cost of capital" concept specifically men-

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tioned in the Hope Case, but said that "this is neither a new nor novel concept." He explained:

... Financial data bearing upon cost of capital has been introduced in rate proceedings as far back as I can remember. Moreover, the cost of capital emphasis is employed not only by the Federal Power Commission but quite generally by regulatory commissions in this country. There was no warrant, therefore, for the charge that the commission in the Northern Natural and other recent cases has departed from its long-time practice.

BUCHANAN also took issue with criticisms of recent commission decisions charging the FPC with dropping its over-all rate base approach through a fixed percentage return. "Let me say that we have not forsaken the over-all rate base approach and we were never committed to an inflexible 6 per cent return," he said. "The history of our natural gas regulation demonstrates that conclusively. But even if such industry conclusions were valid it was industry itself then that violated the alleged standard. Those that complain now because we do not fix invariably a 6 per cent return are the very ones who sought rates of return of 6½ per cent, even in excess of 7 per cent, completely disregarding the alleged 6 per cent standard and apparently without any attempt at justification other than desire for a greater yield and therefore a higher market for their common equity. Having themselves cut the pattern, it was incumbent upon us to trim it up or down to size. As I have said, we are concerned in assuring sound investment and an adequate return thereon. We have no interest in encouraging speculation. The specter of 1929 is yet too clear. Once we depart from the established price at the market place, we leave our channel markers and may end on the shoals."

Chairman Buchanan rejected the suggestion that the commission should fix the rate of return in such manner as to maintain the market value of securities.

Such a method, he said, "would make regulation a complete sham." "Actually, of course, the market value is reflective of earnings and any attempt to make earnings support a given market value would be putting the cart before the horse. Moreover, such a plan might conceivably have some economic repercussions. I am sure you will agree that the excessive speculation in holding company securities in the late 1920's was a materially contributing factor to the subsequent financial debacle," he added.

THE severe criticism of the commission for its use of studies of the historical cost of capital in determining fair rates of return in the Northern Natural, Colorado Interstate, and Mississippi River Fuel Corporation cases drew comment from another FPC commissioner, Nelson Lee Smith, in his address last month before the Section of Mineral Law, American Bar Association, in San Francisco. Smith noted the assumption in some quarters that there is "something fixed and immutable about the 6 per cent rate of return . . . Implicit in some of the complaint against what has been called 'the elimination of appreciation in the prospects of natural gas equities' there appears to be an element of surprise that these securities should be treated as stable utility investments rather than as speculative ventures," he said.

"What, actually, has the commission done?" he continued. "Confronted in several instances by exaggerated claims — which it rejected — that inflationary conditions necessitated increases of rates of return to 6½ per cent, 7 per cent, or higher, it sought objective standards upon which to base an informed judgment regarding the financial requirements of the companies in question. Had it accepted their contentions on the basis of no more convincing evidence than they presented, or had it simply picked a figure out of the air, the commission would have been open to well-merited criticism. Instead it based its determinations upon what appeared to be the best measure of the composite judgment of

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the market place as to returns currently anticipated on comparable investments. In so doing the commission was guided by the principles which the Supreme Court of the United States over thirty years ago stated as governing the determination of the fair rate of return for public utilities."

COMMISSIONER Smith said a paragraph in the opinion of the court in the Bluefield Case "deals so effectively with the subject that its quotation in full seems appropriate in the present connection." The court said:

... What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public *equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures.* The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and sup-

port its credit and enable it to raise the money necessary for the proper discharge of its public duties. *A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.* (Emphasis supplied.)

Stressing the court's recognition that rates of return vary from time to time in accordance with changes in investment and business conditions, Smith noted that the court related such returns, not to speculative profits but to yields on comparable investment opportunities. "These are not new or novel approaches," Smith pointed out; "they have long been accepted as standards in public utility regulation." Smith said the duty of the commission is to encourage, not to discourage, sound, conservative financial management and economy of operation. "It should not limit its attention so closely to past performance as to ignore conditions which may reasonably be anticipated in making rates for the future," he said. "Perhaps it can be shown," he concluded, "that somewhat greater emphasis on prospective, as compared with past, costs of borrowing will be required to attract capital, or that a somewhat larger margin for the equity will be needed to maintain incentive. But if this is the case, the commission will have to be convinced of it by more compelling proof than has been offered thus far."

—F. M.

Field Storage for Chicago's Gas Consumers

THE construction of large-volume underground storage facilities is the only sound solution to meet the increased demand for space-heating gas, according to James F. Oates, Jr., chairman of The Peoples Gas Light & Coke Company of Chicago. At the Centennial of Engineering Convocation in Chicago two months ago, Oates described his company's successful search for and the plans

for the development of a vast natural gas storage "reservoir" deep within the earth. The particular geologic formation used by Peoples Gas is known as Herscher dome, located in western Kankakee and northern Iroquois counties in Illinois. Studies revealed the structure at Herscher to be a closed anticline—a giant dome nearly 15,000 acres in extent—containing a reservoir of highly porous and

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permeable sandstone 100-feet thick and one-third of a mile below ground. "It is an aquifer [water-filled strata] of almost ideal characteristics and capacity," Oates said. "Indications are it will have an effective storage capacity that will prove larger than any storage field now in use, and a deliverability—the capacity to yield up the gas once it has been placed in storage—that will be higher than that of any field in operation."

Peoples Gas is counting on the reservoir ultimately holding at least 90 billion cubic feet of gas which may be withdrawn as needed. According to Oates, the consumers of his company in one year use the equivalent of slightly more than 100 billion cubic feet of 1,000 BTU natural gas. At full operation, the Herscher field is expected to be capable of delivering a very impressive peak-day maximum of one and one-half billion cubic feet of gas from storage. "Such a maximum delivery from storage, when combined with the delivery capacity of our system's three long-distance pipelines, would make available to the consuming public on peak days a volume which would be about two and one-half times the amount of gas which the Texas-to-Chicago region pipelines could deliver without the storage field's help."

THE Herscher reservoir is also expected to contain at least 90 billion feet of "cushion gas"—which is used to exclude water from certain regions within the reservoir and to provide the steady pressure needed to maintain the field's required deliverability.

Construction plans call for the progressive development of the field as additional blocs of house-heating customers are connected to the mains of the distribution companies. Unless the steel shortage alters the timetable, People Gas expects to inject the first gas in the summer of 1953, and to withdraw some gas for use in the heating season of 1953-54. It is estimated that for initial operation, the project will cost approximately \$17,000,000 and that an investment of about \$50,000,000 will be required to bring the field up to full operation.

The need for a major storage field to serve the Chicago area has become acute since World War II, Oates said. He pointed to the 200,000 single-family dwellings now on the waiting lists of the several distribution companies. "With the demand climbing as it is—with new house-heating applications being received by these utility companies at the rate of approximately 10,000 each month—our analysts foresee a possible future additional house-heating load of 800,000 customers. We are of the belief that the Herscher field can store sufficient gas so that eventually all of these customers can be supplied," he said.

OATES believes a compelling factor in the rising demand for space-heating gas to be the fact that gas, traditionally the most attractive house-heating fuel, is selling, pursuant to regulated rates, at a price substantially less than the unregulated prices of competing fuels. "The selling price of gas here (in Chicago) has remained constant since long before the war while costs of oil and coal have more than doubled," he pointed out. In order to protect the supply for the mass of general customers, he said, Peoples Gas, like other public utility companies, has been forced to operate under house-heating limitation orders—"an unhappy and unendurable life, both for the public and for the public utility enterprise," Oates stated:

There is only one sound solution for this problem. The demand such as it is today cannot be met by just building more costly pipelines, particularly when long-distance natural gas systems cost between \$150,000,000 and \$200,000,000 apiece. It can only be solved by a large-volume underground storage facility which will build up adequate reserves for wintertime withdrawal, and do so at the lowest possible cost to the utility company and the consumer.

One can readily appreciate the worth of the Herscher field when we recall that at top capacity it will match the effectiveness, from the standpoint of

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peak-day deliverability, of three new major pipeline systems which would cost more than \$550,000,000 to build. Any such investment would be highly questionable, of course, because it would require the customer to pay a prohibitive price for every therm of heating gas he might use.

Another factor in favor of underground storage is the 25 per cent load factor, Oates said. If the supply of natural gas transported 1,000 or more miles from producing fields was used only to serve house-heating customers, the pipelines for the most part would lie idle in summer and would be only partly used during much of the remainder of the year, he pointed out. "To help meet the problem of extreme seasonal fluctuations in the house-heating load, many utility companies not able to store the excess gas available during periods of low firm customer demand have adopted the policy of selling such gas on a low-rate interruptible or off-peak basis to industries and businesses equipped to burn either gas or an alternative fuel." Such a situation, if it became permanent, would be contrary to the industry's long-range policies for the conservation of natural gas reserves, he said. If a utility were to provide adequate storage space for its excess gas, rather than selling it for lesser economic uses, reserve supplies in the Southwest fields would not be depleted so rapidly, thus serving the public interest as well as its own.

OATES concluded his address by stressing management's primary responsibility to serve the public interest. "No thoughtful representative of management could honestly state anything else but that present-day management not only does, as a matter of sound business philosophy, but must, as a matter of self-interest, represent the public interest in the America of today," he said.

"Stated as briefly as possible," he continued, "the basic aim of management is the attainment of the maximum of productivity so as to provide an uninterrupted and adequate flow of goods and

services at reasonable prices, while at the same time paying employees fair wages, providing them with good working conditions, making provisions for research, expansion, and replacement of properties, and paying reasonable returns to the people who have invested their savings in industry.

"These are worth-while objectives and, if attained, they will result in an improvement in the standard of living for all—employee, customer, investor, and manager alike. . . .

"To many people the term, capitalistic system of free enterprise, does not describe the America of our age. In fact it is widely used to libel America. Throughout the greater part of the world, Capitalism means something completely foreign to our free, competitive system. Capitalism to the greater number of the world's inhabitants means the predatory exploitation of peoples and resources by selfish groups which deliberately create monopolies, which by agreement restrain trade and competition, and which have no conception of the vitality of competition and the unceasing necessity of retaining earnings for replacement, improvement, and expansion of tools and plant. In contrast the business economy of America is, and must remain, dynamic, not sterile. It is based upon belief in free competition, a way of life which, if actually observed by other than pious pronouncements, necessarily serves the public interest."

OATES listed four facets of business success: profits, adequate tools and plant, an understanding and reliable organization, and public confidence in the company and its products. "Each businessman knows," he said, "the inexorable law that if he betrays the public in terms of price, quality, or representation, his competitors will take away his business with startling rapidity. We have heard in recent years a considerable amount of talk about the evils of bigness per se and doubtless certain of these views have merit in certain quarters—but bigness is not evil per se for many reasons which we are beginning to comprehend."

The March of Events



In General

Natural Gas Line Authorized

THE Board of Transport Commissioners recently authorized the Westcoast Transmission Company to build a natural gas pipeline from the northern Alberta-British Columbia border area to Vancouver, British Columbia, and the British Columbia-United States border.

Earlier, the board had given the company a qualified authorization for the 960-mile project, provided a survey would establish that there were enough gas reserves in the Peace river district to justify the line.

In its final decision, the board said a survey made by Federal engineers had indicated reserves of 2,506 billion cubic feet in that area.

On the basis of evidence before the board, the estimated reserves would be

enough to supply for at least twenty-five years the company's expected markets in British Columbia and the U. S. Pacific Northwest.

To get into the U. S. market, Westcoast will need authorization from the Federal Power Commission. It now has an application pending before that body.

It has been indicated the U. S. authorization is essential to the construction of the line, as the available British Columbia market is not considered large enough to carry the \$111,000,000 cost of the Canadian section of the project.

Westcoast officials said that if approval were obtained from the Canadian and U. S. courts this year, construction of its line could be completed by mid-1954.

The board's order specified completion by October 31, 1955.

Connecticut

Rate Increase Authorized

THE Hartford Electric Light Company on October 10th received authority from the state public utilities commission to increase its rates by \$1,-

571,000 a year. The company said the boost would go into effect on bills for service on and after November 1st.

The electric bill of the average residential user will increase by about 70 cents a month.

Florida

Agree to Plant Expansion

By better than a 5-to-1 margin, Jacksonville residents last month agreed with the city utilities commissioner that an \$18,000,000 expansion and improvement program for the municipal electric light plant is urgently needed.

The favorable vote on a revenue cer-

tificate issue necessary to finance the new facilities was 6,240 for and only 1,057 against, or 86 out of every 100 persons who voted, voted for the issue. The city thus received the green light from the voters to go ahead with a program which will take care of Jacksonville's constantly increasing electric needs for the next few years, it was said.

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Georgia

Rate Increases Granted

THE state public service commission last month granted rate increases of \$1,604,000 to the Georgia Power Company and \$926,606 to the Southern Bell Telephone & Telegraph Company.

The power company had asked the commission for a rate increase of \$4,250,000 and Southern Bell for \$1,236,800. The commission, however, trimmed the requests to cover only wage raises granted recently to employees of both companies.

Commission Chairman Matt L. McWhorter said the power rate hike will make a difference of from 5 to 25 cents a month in the bill of the average residential consumer.

There will be no increase for the first 40 kilowatt hours of electricity per month to the consumer. Starting at 40 kilowatt hours, rates will increase gradually for a high of an extra 25 cents per 100 kilowatt hours per month. All over 100 kilowatt hours will mean a 25-cent increase.

For commercial users, the power company was allowed a \$377,600 net rate increase and for industrial users a \$550,000 net increase.

The main increase in telephone rates will come from a standard 10 cents per call rate from pay stations all over the state, a rate already in effect in five cities.

Increases for both companies are effective November 1st.

Kentucky

Ordered to Supply Gas

An order directing the Kentucky West Virginia Gas Company to supply the Allen & Dwale Gas Company with natural gas for Allen, Floyd county, was announced by the state public service commission last month.

Kentucky-West Virginia, which has headquarters at Ashland, already was

selling gas at wholesale to the Allen & Dwale firm for about 100 customers at Dwale, near Allen.

The commission ordered that it make available gas for the retailing firm's approximately 200 customers at Allen. It was explained natural gas for Allen formerly was obtained from wells now exhausted.

New York

Gas Application Rejected

RULING that present natural gas supplies are too limited to permit the heating of large buildings with gas-fired space heaters, the state public service commission has rejected an application of the Niagara Mohawk Power Corporation for permission to supply gas for heating purposes to a General Electric Company warehouse at Gloversville.

In a recent report to the commission based on the company's application, Chief Power Engineer Randolph H. Nexsen stated that the heating requirements of the warehouse are equivalent to those of

about 12 average-sized homes being constructed today.

"To permit modification in this specific case as requested by the company could result in applications for large-volume usage in such numbers that the gas requirements of the company might exceed its available supply and jeopardize service for essential residential usage."

Nexsen pointed out also that demands for natural gas service in the territory converted to that fuel during 1951 have been far greater than the company anticipated, with a resulting increase in the company's requirements for natural gas from its supplier. Present company esti-

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mates as to gas requirements for its eastern division during the 1952-53 season

are about 62 per cent more than for the actual peak day during last winter.

Vermont

Approves Sale

THE state public service commission recently approved the sale of the Blair-Vermont Plywood Company's electric power system to the Citizens Utilities Company of Newport. The commission reported finding the transfer for the public good.

The sale includes the distribution system in the towns of Westfield, Troy, and

North Troy and the 600-kilowatt Baker hydro power plant on the Missisquoi river, near South Troy. Also included in the sale is the transformer substation which supplies the Blair-Vermont manufacturing plant.

The Blair-Vermont system will form an integral part of the larger Citizens system. The new owners said they would make immediate improvements to the former Blair system.

Virginia

Favors Gas Line Proposal

THE state corporation commission will actively support the Gulf Interstate Gas Company's plan to lay transmission lines from Texas to West Virginia. By so doing, the state commission hopes to guarantee an adequate supply of natural gas for Virginia consumers.

Chairman H. Lester Hooker has petitioned the Federal Power Commission for permission to intervene in behalf of the company's application when it comes up for a formal hearing, it was announced last month.

The petition points out that gas users

in the state are supplied by the Virginia Gas Transmission Corporation and the Virginia Gas Distributing Corporation, both of which are subsidiaries of the Columbia Gas System. The Columbia system would receive additional supplies of natural gas if the Gulf Company's line is laid, and the amount of fuel available to Virginia would thus be increased.

The state commission has heard testimony in recent cases that the supply of gas in Virginia "is not sufficient and adequate to meet the full requirements of the markets," as is pointed out in the petition to the FPC.

Washington

Proposed Levy Draws Protest

OPPOSITION to an increase in the city tax on the Clark County Public Utility District of from 3 to 5½ per cent to raise about \$30,000 needed to balance the city's 1953 budget was made by V. M. Cleaveland, PUD manager, to the Vancouver city council recently.

Although the city's preliminary budget for 1953 shows a large savings in expense as compared to that of 1952, it is out of balance \$30,000 due to the expected loss of that amount because of the ordered ouster of the slot machines.

Cleaveland said the PUD was opposed to any increase in the cost of electric power to the people for any reason whatever. An increase in the tax would be reflected in a rise in monthly bills of consumers in Vancouver, not throughout the county, as some people previously had understood.

Cleaveland suggested, as an alternative, postponement of interest and principal for two years on the cost of installing the Vancouver ornamental light system. His proposal was placed on file without action.



Progress of Regulation

Rate Proposals Partially Settled on Basis of Adverse Decision in Earlier Proceeding

A DEPARTURE from the usual procedure resulted in the Northern Natural Gas Company being required to file new rate proposals, to become effective under bond, before final disposition of a rate proceeding before the Federal Power Commission. The commission, in *Re Northern Nat. Gas Co.* Opinion No. 228, Docket Nos. G-1382, G-1533, June 11, 1952, had considered several issues and disposed of them adversely to the contentions of Northern. The commission then, in *Re Northern Nat. Gas Co.* Opinion No. 233, Docket No. G-1881, July 30, 1952, granted a motion to dismiss other rate proposals to the extent that the issues involved had been disposed of adversely in Opinion No. 228.

An objection by the company that Opinion No. 228 and the accompanying order was not a final order but was subject to rehearing and possible court review was answered with the statement:

... it is well settled by the courts that a commission order is presumptively valid when issued, and that it continues to be so until altered or set aside by the commission or by the courts. The fact that the order may be subject to application for rehearing and court review does not derogate from that presumption of validity.

An objection that the granting of the motion on the basis of the previous determination of the same issues in Opinion No. 228 would deprive the company of the hearing provided for in § 4(e) of the

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Natural Gas Act was also rejected. The commission said that Northern had had a full and adequate hearing on the issues involved in the motion. Issues heard in detail and decided after careful deliberation less than a month before need not, according to the commission, be considered anew in the other rate proceeding. There was no allegation that conditions or circumstances had changed in any way since the former opinion.

Determination of these issues adversely to the company resulted in the exclusion of revenue claims in excess of \$7,000,000. Therefore, the commission considered it appropriate to require an adjustment of rates at the time. The commission said:

Although any sums collected by Northern and later found by us to be unjustified would eventually be returned to those entitled to restitution, such procedure here would be unconscionable. Any collection and subsequent return of revenues based on an increase to which Northern is not entitled would place an undue and unnecessary burden both on Northern and on those paying the increased rates. And the payment of such increased rates would be an injustice to Northern's customers and possibly eventually to consumers dependent on such customers, where as here it is clear that any such increases must eventually be refunded.

By the same reasoning the commission

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decided that Northern should refund moneys collected on the basis of increased rates, collected under bond, to the extent that revenues represented the amounts disallowed. The company was then required to file a refund bond to cover possible disallowance of claims, by final or-

der of the commission, to the extent that they had not been disposed of by this commission action. *Re Northern Nat. Gas Co. Opinion No. 233, Docket No. G-1881, July 30, 1952; application for rehearing and stay of order denied September 26, 1952.*



Existing Service Obligations and Finances Considered in Natural Gas Certificate Proceeding

THE Illinois commission granted a pipeline company's petition for a certificate to render natural gas service to a chemical corporation where local gas distributors in the area indicated that they had no interest in extending service to the plant.

Counsel for the pipeline company offered for approval the contracts which had been made with the chemical company. Counsel did not believe that these contracts were within the purview of §§ 8(a) and 27 of the Illinois Utility Act, which require certain types of transactions between utilities and affiliated interests to be approved by the commission.

However, counsel stated "that it

wished to avoid any disputed jurisdictional question in this proceeding and would not object if the commission should assert jurisdiction over the contracts."

In approving the petition, the commission observed that moneys expended and to be expended by the utility were out of funds on hand and that the utility had no intention to issue notes or other securities to obtain funds to make the improvements required. The commission also found that the contract provisions would not impair the pipeline company's ability to provide and maintain facilities necessary to render adequate service to present utility and industrial customers. *Re Panhandle Eastern Pipe Line Co. 40415, August 13, 1952.*



Adequacy of Gas Supply Emphasized on Approval of System Expansion

THE Federal Power Commission authorized a natural gas pipeline company to acquire, relocate, construct, and operate facilities designed to increase system capacity. The facilities involved, most of which were already in operation pursuant to temporary certificates, were being used or were proposed to be used to supply natural gas service to some new customers and to increase service to existing customers. The commission believed that the most important matter presented for consideration was the adequacy of supply.

The importance of an adequate gas supply showing has been stressed by the commission in many certificate proceedings. Every certificate under the Natural

Gas Act must be based upon appropriate findings, among others, that the applicant for the certificate is "able and willing properly to do the acts and to perform the service proposed." An adequate gas supply, the commission said, is the bedrock upon which such findings must be grounded. A supply can be considered adequate, according to the commission, only if the volume available is sufficient to meet the demand requirements for the service proposed, if such volume is assured over a sufficient period of years to justify the expenditures required for the construction of the project, and if that assurance of a continuing supply of natural gas meets the requirements of public convenience and necessity.

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Generally, a supply of natural gas should be assured for a period approximating fifteen to twenty years if the project is to be economically sound and in the public interest and if the company is to be in a position to meet its obligations to both investors and consumers. The company's gas supply contracts indicated that it had a reasonably adequate supply for meeting system requirements for a sufficient number of years in the future to warrant the issuance of the certificate.

A question was raised concerning accounting adjustments in connection with the proposed acquisition of compressor stations. The company has been operating the stations under a lease agreement. It acknowledged that if these stations had been constructed by it, and if it had

owned them since the commencement of their operation, it would have accrued depreciation at a rate of $3\frac{1}{2}$ per cent. This is the rate which it currently charges upon its owned compressor station facilities.

Consequently, the commission deemed it reasonable to require the company to record upon its books an appropriate adjustment reflecting depreciation covering the period the stations have been operated under lease. It was deemed sound accounting and in the public interest that such adjustment should provide for charging to earned surplus the depreciation upon the facilities during their operation under lease. *Re Mississippi River Fuel Corp. et al. Docket Nos. G-1281 et al. August 28, 1952.*



Gas Storage Facilities Authorized Subject to Later Action on Charges and Financing

NATURAL GAS STORAGE COMPANY OF ILLINOIS was authorized by the Federal Power Commission to construct, acquire, and operate facilities for the transportation and underground storage of natural gas in interstate commerce. The company proposes to develop and operate storage facilities in a natural underground sandstone reservoir in a portion of the Galesville and Ironton geological formations located in Kankakee and Iroquois counties, and near the village of Herscher, Illinois. The company will transport and store gas for the account of Texas Illinois and Natural Gas Pipeline Company of America, and will make available the same natural gas to Texas Illinois and Natural Gas Pipeline for resale and consumption in the areas served by those companies.

The commission made its approval order conditional upon the company filing a gas tariff satisfactory to the commission and also conditional upon the submission of a plan of financing satisfactory to the commission. The company had presented a proposed form of tariff containing a cost formula rate to be charged for storage service. The proposed cost of service

rate would include a $6\frac{1}{2}$ per cent return on a net investment rate base determined monthly, and including working capital, comprising materials and supplies, one-eighth of annual operating expenses and prepayments. The commission commented:

The proposed tariff provides for an adjustment of the charges at the end of each cycle to reflect the actual volumes of gas held in storage, rather than the estimates. The method of making the estimates, however, and the year-end adjustments are not clearly set forth in the proposed tariff. Moreover, the applicant's computation of working capital does not give effect to the collection in advance of payment of Federal income taxes. We are therefore unable on this record to express an opinion upon the propriety of applicant's plan for allocating storage costs.

It appears to be reasonable, in the circumstances of this case, that the cost formula for the applicant should include a rate of return which is no higher than the cost of securing the capital necessary to construct appli-

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cant's project. This cannot be determined until after applicant has entered upon a definite plan of financing.

Re Natural Gas Storage Co. of Illinois, Opinion No. 236, Docket No. G-1757, September 11, 1952.



Adjustment of Appliances upon Conversion to Natural Gas Excludes Special Equipment

THE New York Supreme Court upheld a commission order limiting a gas company's obligation to adjust appliances of consumers upon conversion to natural gas.

The state commission, in approving the conversion, had authorized the issuance of securities to finance the payment of the proper charges and cost directly related to conversion of the gas company's plant and system, as well as the conversion of equipment and appliances of its customers. The company's obligation was held to have been fulfilled if the appliances and equipment which had been previously served with manufactured gas were converted in such a manner that the gas burners would function adequately, satisfactorily, efficiently, and safely.

One customer, claiming this determination was unjust and unduly preferential, was engaged in the manufacture of glass ampoules and related objects use primarily for pharmaceutical purposes. These must meet minute specifications. He had devised and constructed apparatus to accomplish his purpose with the use of manufactured gas. The court held that the company's obligation to adjust appliances did not require it to elongate,

or to pay the cost of elongating, the equipment of this particular customer to revise his appliances to effect a variation of the time during which the articles manufactured by him were exposed to a gas flame to produce a partial heating effect.

The customer claimed that the equipment and appliances of all other consumers had been converted so that they performed satisfactorily the same functions performed previously with the use of manufactured gas. However, he did not allege any facts showing that under the same or substantially similar circumstances the gas company had treated other customers differently. The court said that, subject to a leading prohibition that the company shall not unjustly discriminate or give undue preference or disadvantage to customers similarly situated, the law left the utility, as it was at common law, free to extend its facilities and to afford inducements to encourage its business and to foster its interests on the same principles which are followed in other pursuits and trades. The court held that the commission's determination did not violate any law and was not without rational basis to support it. *O'Sullivan v. Feinberg et al. 114 NYS2d 515.*



"Value" of Certificate Is Improper Rate Base Item

THE Wyoming commission, in denying a pipeline company's application for a rate increase, refused to include the "value" of the company's certificates or franchises as proper rate base items. It conceded that the company should be permitted to recover, through amortization during its lifetime, the amount of cash actually expended by it in good faith in obtaining its operating rights. However, it did not believe that it should be

allowed to add this expense to an arbitrary value assigned to the certificates and to capitalize the resulting figure for rate-making purposes. These certificates were given to the company by the state for its use in providing the public with a utility service. They should not be capitalized in any amount against its customers.

Net investment cost was approved as a rate base. The commission described

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such a rate base as consisting of the average investment in plant (original cost) devoted to utility service, less average depreciation reserves, plus average investment (original cost) in materials and supplies, plus an allowance for cash working capital. The commission deemed this type of rate base to be fair both to the patrons of a utility and its investors. It is practical and easily understood. It avoids uncertainty, guesswork, and repetitious rate cases. Furthermore, it is used by other regulatory bodies not otherwise bound by statute and has been approved by the courts.

The company is engaged in the business of gathering crude petroleum within its oil fields and transporting it by way of pipeline to refineries and railroad tank car-loading facilities. The commission felt that the company represented a unique utility whose successful operation was dependent upon many speculative factors. For that reason it was inclined to look at the company's operating results with some degree of liberality. The risk element, for example, is still present, although somewhat abated.

The commission had previously found that the company's rates were producing operating revenues in an amount over and above those necessary to provide a rea-

sonable surplus. The excess surplus was being used for the construction of gathering lines within the oil fields. The commission said that funds used to create or expand the company's plant facilities should be provided by its investors or obtained through short-term loans or the issuance of securities.

Rates which provide a public utility with revenues above those necessary to pay its operating and depreciation expense, income tax, a reasonable dividend to its stockholders, and a reasonable "carry-down" to surplus to take care of emergencies, are unreasonable and should be reduced. Otherwise, the commission said, the end result is to require patrons to furnish an undue part of the company's capital and then in turn pay, through rates, a return on capital which they have provided.

The commission said that if the company's future operations under prudent management and existing rates do not result in a return which will allow the company to pay a reasonable dividend on outstanding stock, exclusive of that issued for franchises, and carry down a comfortable amount to surplus, the company may again apply for a rate increase. *Re Plains Pipe Line Co. Docket No. 9210, September 15, 1952.*



Wholesale Company's New Demand and Commodity Charge Justifies Higher Retail Gas Rate

A GAS company's application for increased rates based on a rate increase which its supplier, Panhandle Eastern Pipe Line Company, had been awarded by the Federal Power Commission was approved with some modification by the Illinois commission.

Panhandle's new tariff was explained by the commission in some detail. It provides

... for a demand and commodity form of rate and general terms and conditions of service with respect to sales of gas for resale. Under the tariff Panhandle enters into service agreements with its utility customers in which they

nominate the maximum volumes of gas Panhandle is obligated to deliver each month of the year. The tariff provides for a uniform contract demand for the months of November to March, inclusive, and may vary for the remaining months of the year. The evidence shows that in order to secure the gas required by heating customers it was necessary for petitioner to contract for the volume needed on the coldest winter day, even though there are many days during the five winter months when due to temperature conditions such volume is not required. . . . Having nominated the aforesaid contract

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demands, respondent is required to pay the demand charge, in an amount of \$2.15 per thousand cubic feet per month, for gas taken up to the amount of the contract demand and a demand charge of 90 per cent of said contract demand if a lesser amount is used.

The contract also provided for a rather severe penalty for all gas taken in excess of the contract demand. From these facts the commission concluded that it was necessary for the company to contract for a relatively high demand.

The commission summarized its feelings in regard to the rate application in this statement:

Considering the fact that the original cost of respondent's property is as yet undetermined, and cognizant of respondent's increased operating expenses, the commission is of the opinion that some increase is warranted at this time; however, not to the extent proposed herein by respondent. Therefore, the commission will establish certain temporary rates during an interim period which will enable respondent to operate without loss until such time as a final determination of the issues herein can be resolved.

Re Citizens Gas Co. 40498, September 16, 1952.



Commission Acts under New Law Requiring Rate Opinion In Condemnation Proceeding

THE New York legislature this year passed a law providing that the commission shall certify to a court, in proceedings to condemn property subject to commission jurisdiction, (1) the annual earnings which might reasonably be anticipated by the present owner under reasonable rates with due regard among other things to a reasonable average return upon capital actually expended and to the necessity of making reservations out of income for surplus and contingencies and (2) the rate base and the rate of return from which its estimate of earnings is derived.

This law was passed because, in the opinion of the legislature, some condemnation proceedings are not in any real sense adversary and, because of inadequate presentation, awards had been made which were not based upon the damage to the owner but upon the benefit to the condemner.

It may be noted that the commission last January, in *Re South Bay Consol. Water Co. 92 PUR NS 90*, decided that it had no power to set aside a sale of property by a water company to a water authority where the property had been transferred by judicial sale in a condemnation proceeding. The commission at that time, however, indicated its disapproval of the acquisition price.

Acting under this new statute, the commission has now made the required certification respecting the proposed condemnation of certain properties of Western New York Water Company by Erie County Water Authority. The commission thought it clear that it was not the intent of the legislature to transfer from the commissioners of condemnation to the public service commission any of the powers which the commissioners or the court enjoyed under the law; but that it was the public service commission's duty to certify what earnings could be anticipated from the property under the standards suggested by the legislature, as interpreted by the courts, as an aid to the commissioners in reaching a determination. The commission then went on to say that a utility is entitled to earn on its property a sum sufficient to attract capital to the enterprise. Emphasis since the Hope Case decision has been upon the end result rather than the method by which that result is reached. It said:

It is obvious that if we start with a predetermined rate of return, the end result will be different depending upon whether we take the company's investment in the property, its so-called fair value, or its reproduction cost new. A just result can be obtained using any

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theory as to the proper determination of a rate base provided the rate of return upon the property is correspondingly adjusted.

The commission then noted that it has followed the original cost theory in determining a rate base. Obviously, said the commission, there may be differences between the evaluation of the company's property for condemnation and for rate purposes. A company may own property of value which is not used or useful in rendering service to the public. This would not be included in the rate base but it may have a value. Moreover, in condemnation proceedings cost of organization is not included while in a rate case it is essential to rendering service that the company be organized and such costs should be considered.

The commission said that it had followed what it believed to be the soundest method of rate making within the purview of the statute and had used the

type of rate base which for many years had been held to be the correct interpretation of similar statutes, but it added:

We wish to make it clear, however, that the use of some other type of rate base, assuming it to be proper, would not affect the end result and that the rate of return which we have determined as proper herein would not apply to a rate base fixed, for example, on the present cost of reproducing the property.

In short, we believe it to be our responsibility under the statute to furnish the court with our determination as to what the property of the company could reasonably be expected to earn under proper regulation fair to both the company and the consumer upon the evidence in the record before us.

Re Western New York Water Co. Case 15799, September 30, 1952.

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Public Utilities Reports (New Series) are published in five bound volumes a year, with the P.U.R. Annual (Index). These Reports contain the cases preprinted in the issues of *PUBLIC UTILITIES FORTNIGHTLY*, as well as additional cases and digests of cases. The volumes are \$7.50 each; the Annual (Index) \$6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."

KENTUCKY PUBLIC SERVICE COMMISSION

Re United Fuel Gas Company

Case No. 2349
August 11, 1952

APPPLICATION for approval of proposed gas rate increase; proposed increase disapproved and smaller rate increase prescribed.

Apportionment, § 59 — Natural gas company — Production plant.

1. The annual sales factor was considered reasonable as the basis for the apportionment of the production plant of a natural gas company, furnishing both interstate and intrastate service, for the purpose of fixing intrastate rates, p. 67.

Apportionment, § 59 — Natural gas company — Transmission and storage plant.

2. A peak month factor rather than a peak day annual sales factor was adopted for the purpose of apportioning transmission and storage plant of a natural gas company, furnishing both interstate and intrastate service, for the purpose of fixing intrastate rates, p. 67.

Apportionment, § 31 — Natural gas company — Cost of gas supply.

3. The cost of the gas supply purchased by a natural gas company from interstate natural gas pipelines was apportioned on the basis of the annual sales factor in preference to a method whereby the cost of the gas would be apportioned into the demand and commodity charges as calculated under wholesale rate schedules applicable to the purchases, and then by apportioning the demand charge on the basis of the peak day sales factor and the commodity charge on the basis of the annual factor, p. 68.

Revenues, § 10 — Interest during construction.

4. Interest during construction should be considered as an income item, in testing proposed natural gas rates, where construction work in progress and retirement work in progress is considered in the rate base, p. 69.

Expenses, § 92 — Rate case expenses — Amortization period.

5. Rate case expenses should be amortized over a period of not less than three years, p. 70.

Valuation, § 39 — Rate base determination — Reproduction cost.

6. Estimated cost new, which appears to be another variation of reproduction cost new, was rejected as the sole method to be used in arriving at a rate base, although it was considered subject to statutory limitations, p. 70.

Valuation, § 73 — Original cost — Use of average plant.

7. Use of average plant was considered proper in arriving at an original cost rate base, p. 71.

Valuation, § 299.1 — Working capital allowance — Effect of tax accruals.

8. No allowance should be made for cash working capital where a company is able to accrue large sums for income tax purposes in advance of the due

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date, such tax accruals are available for the general conduct of the company's business, and the minimum balance will more than offset the amount claimed for cash working capital, p. 71.

Return, § 101 — Natural gas company.

9. Natural gas rates yielding a return of about 6.5 per cent on a net original cost rate base were considered sufficient to enable the company to pay operating expenses, interest on borrowed money, obligation to its stockholders, and to attract the capital necessary to continue to provide adequate service, p. 71.

APPEARANCES: For the Applicant: Louis Cox, Attorney at Law, Frankfort, and C. E. Goodwin, Assistant Counsel, United Fuel Gas Company, Charleston, West Virginia; Thomas Phipps, City Attorney, Catlettsburg; A. W. Mann, Corporation Counsel, City of Ashland, Ashland, and Diederich & Lycan, Attorneys at Law, Ashland, for the protestants.

For the Commission: J. Gardner Ashcraft, Counsel.

By the COMMISSION: On November 21, 1951, The United Fuel Gas Company (hereinafter referred to as "United") filed with the Commission a notice that it proposed to make effective certain increased rates and charges for gas supplied on and after December 16, 1951. United is substantially a wholly owned subsidiary of the Columbia Gas System, Inc., and is engaged in both the interstate and intrastate sale of natural gas. The company delivers gas to retail customers in the cities of Ashland, Catlettsburg, Greenup, Hindman, Inez, Louisa, Raceland, Russell, South Williamson, Worthington, and rural communities and areas in Boyd, Floyd, Greenup, Knott, Lawrence, Johnson, Magoffin, Martin, and Pike counties, Kentucky. The cities of Ashland, Catlettsburg, and Russell appeared in protest to the increased rates.

The proposed adjustments would have increased the annual revenues of the company by an estimated \$324,156. These proposed adjustments were suspended by order of the Commission dated December 13, 1951, for a period of 120 days pending an investigation as to their reasonableness. At the expiration of that 120-day period the rates were further suspended until August 12, 1952. The company, however, chose to place these rates into effect under bond and throughout the period of their suspension have been collecting these rates subject to any order of refund which this Commission may make.

On May 15, 1952, the company filed another notice with the Commission wherein it proposed to increase its rates in the additional amount of \$159,511 for gas service rendered on and after the 14th day of June, 1952. Prior to the effective date of this second notice the general assembly of the commonwealth of Kentucky enacted into law Senate Bill 131, now Chap 46 of the 1952 Legislative Acts, and in accordance with the provisions of that statute the second proposed increase was suspended for a period of five months from and after June 14, 1952.

The question before the Commission then is the need of the company

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for proposed increases in the total amount of \$483,667.

Apportionment

[1,2] United operates an integrated gas system in the states of Kentucky, West Virginia, Ohio, and Virginia by which it transmits and distributes gas to its various wholesale and retail customers. This system includes production facilities located in the several states, facilities for producing liquefied petroleum gas, storage fields wherein large quantities of gas are stored for meeting winter peaks, a transmission system which transports natural gas from points where it is purchased and produced to points of delivery, and distribution facilities for retail service provided in the several states. In addition to its own production and gas purchased from other local producers, United purchases large quantities of gas from pipelines from the southwest gas fields.

It is evident that for a large part of United's operations, a physical separation of its properties, revenues, and expenses applicable to the Kentucky retail business is impossible. Therefore, before this Commission can determine the proper rate for the Kentucky retail business it is necessary to make an apportionment of the commonly used plant and associated revenues and expenses in order to arrive at the proper amounts assignable to the Kentucky retail business.

There are two methods of apportionment before the Commission in this case, one presented by United and the other presented by the Commission's staff. It appears to the Commission that both apportionments follow

the same basic method, the staff apportionment differing from that of United in certain details. We will consider here the more important of these differences with respect to their effect upon the apportionment.

The most important item of utility plant appears to be the apportionment of the production plant. United apportions this item as the basis of its "peak day annual sales" factor which is determined by taking a simple average of the peak day sales factor and the annual sales factor. The peak day factor is determined by taking the ratio of the Kentucky retail sales to the total sales on the day during the test period when United delivered its greatest volume of gas, 16 December 1951. The annual sales factor is determined by taking the ratio of the sales to the Kentucky retail consumer during the test period to the total sales during the same period.

The effect of taking a simple average of these factors is to say that half of the production plant is devoted to commodity and half to a daily peak demand. There is no evidence in this record to support such a conclusion. Indeed, the arbitrary nature of this assumption is set out in the testimony of United's witness Workman when he says, in this connection: "However, without evaluating the percentage actually applicable to capacity cost and to commodity cost, a 50-50 classification has been made."¹ It is the opinion of the Commission that if such a method is to be employed, a more accurate evaluation would have to be made in order to arrive at a reasonable result.

The staff apportioned the produc-

¹ Workman Testimony, page 15.

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tion plant by use of the annual sales factor on the basis that the production plant was not substantially used for meeting peaks alone. In support of its contention the staff cited the fact that during the month of May, United actually produced more gas than it did during its peak month of December. The staff also cited the annual use factor of production on a monthly peak basis of 90 per cent and on a daily peak basis of 87 per cent to support its conclusion.

Another major difference in the plant accounts appears to be the method of apportioning transmission and storage plant. United used its "peak day annual sales" factor, the arbitrary nature of which has already been discussed. The staff used a peak month factor, which is the ratio of the Kentucky Retail sales on the peak month to the total sales during the same period. The staff's reasoning in support of this method is based on evidence that the transmission and storage facilities are used to meet a sustained peak, whereas L.P. gas plants have been installed at load centers to assist in meeting daily peaks. In addition to the arbitrary nature of United's "peak day annual sales" factor it has been pointed out by the staff that the peak day factor is only an estimate made by United, whereas the peak month factor is substantially a measured peak.

It also occurs to the Commission that there are several other objections to relative use on a peak day solely as measure of use of demand. On the peak day of any particular year, the relative mean temperature in the various areas in which the different customers are located would obviously

have a material effect on the relative use of those customers on the peak day. Also, if the peak day should occur on a holiday or a week end, the relative use of the customers might be substantially different from the relative use on a normal weekday. In fact, the peak day of the test period used in this case occurred on a Sunday. These are factors that in the over-all picture the utility might well consider in the design and operation of its system but could hardly anticipate in an apportionment among customers.

For example, if a particular customer (or group of customers) did not use any gas on the peak day of the year, no portion of demand costs would be assignable to him under the peak day factor theory, whereas if the peak had occurred on another day he might well have been assigned a substantial part of such costs. Use of the peak month tends to level off these items, as well as fulfil the requirement of the sustained peak of the staff's testimony.

[3] Turning to operating expenses, a very substantial difference occurs in the apportionment of the cost of the gas purchased from the pipelines from the Southwest. United apportions the cost of this gas into the demand and commodity charges as calculated under the wholesale rate schedule applicable to these purchases, and then apportions the demand charge on the basis of the peak day sales factor and the commodity charge on the basis of the annual sales factor. The staff apportions the over-all cost of this gas on the basis of the annual sales factor.

The Commission fails to see any

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logic in United's contention relative to the demand charge. In order to apportion the demand charge under the wholesale rate schedule on the basis of relative over-all use of customers on a peak day, it must be shown that that peak day alone was responsible for this charge.

Conversely, the record shows that substantially no more gas is purchased by United on a peak day under its firm gas contracts than on any other day of the year. Therefore, it follows that the relative use of various customers on the peak day alone does not directly affect the demand charge any more than the relative use on the hottest summer day. Under these circumstances the Southwest gas obviously becomes a commodity and its over-all cost should be apportioned as such.

Other differences in apportionment of operating expenses are the result of the Staff's apportionment of expenses generally following the apportionment of the plant with which they are associated. Here, another inconsistency is noted in United's apportionment. Although United apportioned its transmission expenses on the basis of its "peak day and annual sales" factor, a substantial portion of its operating expenses associated with this plant were apportioned on the basis of the "peak day sales" factor. For instance, maintenance of transmission mains is apportioned on the basis of peak day sales. From this apportionment, it would appear that having divided the transmission mains into a commodity portion and a demand portion, United takes the position that the cost incurred in maintaining them is applicable entirely to the demand portion

alone, and it cost nothing to maintain the commodity portion. The absurdity of this is apparent.

Having considered both methods of apportionment as set out in this record, the Commission is of the opinion that the staff's method is the more reasonable one and results in a more equitable assignment of costs to the Kentucky retail business.

As an argument in support of the use of its apportionment, United has stated that it has used the same method in its current rate cases before other regulatory authorities under whose jurisdiction it operates and use of different apportionments by these regulatory authorities might result in no responsibility for some costs actually incurred by the company. While it is apparent that such iniquity might result, there is no evidence in this record to indicate that other regulatory authorities will adopt United's apportionment, nor could the Commission for this reason alone adopt an apportionment that in its opinion is inequitable to the Kentucky retail customers.

Test Period

All evidence in this record has been based on United's experience during the twelve months ending 31 December 1951, and this being the most recent period available the Commission will consider it for testing the rates sought herein.

Revenues

[4] The record discloses that during the test period United's total gross revenues were in the amount of \$62,482,695 of which some \$1,397,389 is assigned to the Kentucky retail business under the staff's apportionment.

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Inasmuch as construction work in progress and retirement work in progress will be considered in the rate base, interest charged during construction should be considered as an income item in testing the proposed rates. This item was \$113,988 for the test period, of which approximately \$2,420 is assignable to the Kentucky retail business following the staff's method of apportionment.

Operating Expenses

[5] For the test period, United's actual operating expenses were in the amount of \$50,803,520. United has suggested certain adjustments to these operating expenses to correspond to conditions at the end of the period. These adjustments consist of increased labor costs, increase in the cost of purchased gas, certain decreases in operating expenses associated with property sold and other minor adjustments. These adjustments, except for the item of rate case expense, are not in controversy in the record, and the Commission is of the opinion that they are proper for testing the rates sought herein, inasmuch as rates are being set for the future.

With reference to rate case expense, United has suggested an adjustment of some \$35,000 to the annual expense, this being its estimate of the additional costs incurred by reason of this rate case. The Commission is of the opinion that this expense should be amortized over a period of not less than three years.

Exclusive of rate case expense, the amount of operating expenses assignable to Kentucky retail business for the test period is \$1,186,636. To this must be added the amortization of rate

case expense in the amount of \$11,667.

Other Expenses

The expense items of taxes other than the income and depreciation and depletion expense, as adjusted by United to year end conditions and apportioned to Kentucky retail business by the staff method, appears to be in the amounts of \$57,356 and \$79,997, respectively. The item of income taxes will be treated later in connection with net income. These expenses, together with operating expense as found above, should be considered in determining the net revenues for the purpose of testing the proposed rates.

Rate Base

[6] Evidence in this case discloses three different rate bases, one being the original cost, another being "estimated cost new," and the third being capitalization of the company.

Estimated cost new as used by United appears to be another variation of cost of reproduction or reproduction cost new. It appears to have been determined in this case by applying certain trends to the items of plant.

Any reproduction cost new appraisal is necessarily an estimate and in addition is at best highly speculative. The Commissions' views on reproduction cost estimates have been set out in its opinion in Case No. 1710, Re Southern Bell Teleph. & Teleg. Co. (1948), and reported in 76 PUR NS 33; in its opinion in Case No. 2307, Re Southern Continental Teleph. Co., and need not be repeated here. For these reasons, the Commission refuses to accept the estimated

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cost new as a sole method to be used in arriving at a rate base. However, in conformance with the requirements of the Kentucky statutes, and keeping these limitations in mind, the Commission has carefully considered the estimated cost new rate base as presented in this record.

The record shows that the capitalization of United as of 31 December, 1951, was \$95,774,131 and on the basis of the staff's apportionment it appears that approximately \$2,796,600 would be assignable to the Kentucky retail business. The Commission has also carefully considered this rate base.

Based on the staff's method of apportionment, the average original cost of United's gas plant devoted to the Kentucky retail business appears to be as follows:

Average Plant at Original Cost ..	\$3,303,170
Average Material and Supplies ..	175,654
Average Construction Work in Progress ..	117,474
Average Retirement Work in Progress ..	10,190
Prepayments ..	13,353
	<hr/>
	\$3,619,840

In order to arrive at a net original cost we must subtract the following items:

Reserve for Depreciation	\$993,892
Contributions in Aid of Construction ..	54,364
	<hr/>
	\$1,048,256

This gives a net original cost of some \$2,571,584.

[7] United contends that in arriving at an original cost rate base, the balance in the plant accounts at the end of the period should be used whereas the staff contends that an average of

plant balances for the period should be used in order to obtain a proper relation between actual revenues and expenses and the average plant associated with those items. Although there appears to be some merit to United's contention that it must invest a great deal of additional nonrevenue-producing funds to maintain its current production; nevertheless, the record shows that during the test period the number of customers increased materially and part of the investment was in plant other than production. For these reasons, and in light of the consideration given by the Commission to United's rate of return by reason of the inherent risks of the gas-producing industry, the Commission is of the opinion that use of average plant is not improper in this case.

[8] United has also suggested the addition of cash working capital in the amount of one-eighth of certain operating expenses. Although for the test period, no income tax is assignable to the Kentucky retail business, the rates prescribed in this order will permit it to accrue large sums for income taxes in advance of the due date of the tax. These accrued taxes will in the future be available to United for the general conduct of its business and it appears that the minimum balance will more than offset the amount claimed for cash working capital. For these reasons, the Commission is of the opinion that in this case no allowances should be made in the rate base for cash working capital.

[9] After applying the adjustments as set out heretofore and adjusting for Federal and state income taxes it appears that gross revenues in the amount of \$1,504,708 will pro-

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duce a return of approximately 6.5 per cent on the net original cost rate base as found above.

Having considered the original cost, the cost of reproduction, and the capitalization of United as presented in this rate case, and further considering the additional hazard involved in the natural gas producing industry, it is the opinion of the Commission that gross annual revenues in the amount of \$1,504,708 will enable United to pay its operating expenses, interest on borrowed money, obligation to its stockholders, and to attract the capital necessary to continue to provide adequate gas service to its Kentucky retail customers.

For the foregoing reasons, the Commission is of the opinion and finds:

(1) That the rates set out in United's original and amended notices in this case are excessive, unfair, unjust, and unreasonable in that they would produce gross revenues from the Kentucky retail customers in excess of \$1,504,708.

(2) That the just, fair, and reasonable rates for United's Kentucky retail customers are as follows:

First	2 M Cu. Ft.	\$1.00 (minimum bill)
Next	3 M Cu. Ft. @	.48
Next	20 M Cu. Ft. @	.42
Next	50 M Cu. Ft. @	.40
Next	125 M Cu. Ft. @	.38
Next	400 M Cu. Ft. @	.36
Excess	M Cu. Ft. @	.35

It is therefore ordered:

(1) That the increased schedule of rates for gas service as set out in United's original and amended notices in this case be, and the same are, hereby denied.

(2) That the schedule of rates as set out in the Commission's findings above are hereby fixed and approved and that a tariff in conformity thereto shall within twenty days of the date hereof be filed with the Commission.

(3) That all sums collected under bond in excess of the rates fixed by this order be refunded to those entitled thereto.

CONNECTICUT PUBLIC UTILITIES COMMISSION

Re Algonquin Gas Transmission Company

Docket No. 8716
September 12, 1952

PETITION for authority to excavate public highways for the purpose of laying natural gas pipelines; granted.

Gas, § 3 — Commission jurisdiction — Natural gas pipelines — Foreign corporations.

1. The statutes relating to the construction and operation of natural gas pipe-

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lines and giving the Commission jurisdiction over appeals from orders of municipal authorities relating to the construction of such pipelines apply to any natural gas pipeline company regardless of whether or not it is a domestic or foreign corporation, p. 74.

Appeal and review, § 73 — Stay of order pending appeal — Certificate of convenience and necessity.

2. An appeal from a court order setting aside an order of the Federal Power Commission granting a natural gas pipeline certificate has the effect of staying the court order and leaving the certificate in effect pending the outcome of the appeal, p. 74.

Gas, § 3 — Commission jurisdiction — Natural gas pipeline construction — Excavations in highways.

3. The Commission has jurisdiction over a natural gas pipeline company's appeal from a municipal authority's denial of permission to make excavations in public highways for the purpose of laying pipelines, despite the fact that the company may be a foreign corporation and despite the pendency of an appeal from a court order setting aside a Federal Power Commission order granting a certificate to the company, p. 74.

Municipalities, § 4 — Jurisdiction and powers — Control of streets.

4. The board of selectmen has jurisdiction over the maintenance of highways and is the proper body before which to bring a request for authority to make excavations in the streets for the purpose of laying natural gas pipelines, p. 77.

By the COMMISSION:

Finding

By its petition filed with the Commission July 25, 1952, Algonquin Gas Transmission Company, a corporation organized and existing under the laws of the state of Delaware for the purpose, among other things, of constructing, owning, and operating a natural gas pipeline within and through the state of Connecticut, hereinafter referred to as Algonquin, seeks a determination from this Commission whether a permit should be granted to it to cross certain highways in the town of Danbury numbering fifteen. The petition alleges that the board of selectmen of the town of Danbury is the authority having jurisdiction over the maintenance of the highways within that town; that the board of selectmen refused to grant

permits to cross such highways; and that thereby Algonquin is aggrieved.

By its notice of hearing dated August 4, 1952, the Commission assigned the matter for a public hearing to be held at its offices in Hartford, on August 21, 1952, later continued to August 27, 1952, at request of the town of Danbury. Notice of the pendency of the matter and of the public hearing to be held thereon was given to the company, to the town of Danbury, and to such other parties as appeared to the Commission to have an interest in the matter. At the time and place set down for the hearing, the company appeared by counsel. The town of Danbury appeared by its town counsel.

This action is brought pursuant to § 5640 of the General Statutes, Revision of 1949, which provides that "Any public service company incorpo-

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rated under the provisions of the statutes or by special act for the purpose of transmitting or distributing gas . . . desiring to open or make any excavation in a portion of any public highway for the carrying out of any purpose for which it may be organized . . . shall, if required by the authority having jurisdiction over the maintenance of such highway, make application to such authority, which may, in writing, grant a permit for such opening or excavation upon such terms and conditions as to the manner in which such work shall be carried on as may be reasonable," and under § 5642, which provides, "Any such company aggrieved by the neglect or refusal of the authority having such jurisdiction to grant such permit, or by the terms and conditions therein imposed, may appeal to the Commission, which may, . . . determine whether such permit ought to be granted, or such terms and conditions altered, and may, . . . grant such permit in writing upon such terms and conditions as to the carrying on of such work as it may find just and reasonable."

These above-quoted sections have been incorporated in Chap 264a of the 1951 Supplement to Connecticut General Statutes by the terms of § 1086b, which provides that "The provisions of §§ . . . 5640 to 5642, inclusive . . . shall apply to any company constructing or operating a natural gas pipeline."

Jurisdiction

[1-3] At the hearing, the town of Danbury contested the jurisdiction of the Commission to hear this petition. It alleged first that the terms of § 5640

confined the applicability of the section to companies incorporated under the provisions of the Connecticut statutes and excluded foreign corporations. It alleged further that Algonquin did not possess a certificate of public convenience and necessity issued by the Federal Power Commission authorizing it to sell and deliver natural gas in Connecticut and to construct the facilities therefor.

It appears from a reading of § 1086b, however, that the provisions of the above-quoted statutes are made to apply to *any* company constructing or operating a natural gas pipeline. Although it is fundamental that it is unnecessary to resort to the legislative history of a statute in order to determine the intent of the legislature or otherwise to interpret the meaning of the statute when the meaning is clear, it appears advisable at this point to note that at the 1950 session of the general assembly when the so-called Natural Gas Act, presently included in the General Statutes as Chap 264a, 1951 Supplement, was enacted, the purpose was to regulate companies then contemplating or actually engaged in the construction of pipelines in and through Connecticut. Section 1079b, 1951 Supplement, makes it clear that the general assembly did not confine itself to companies operating as Connecticut corporations only:

"Section 1079b. Transportation of natural gas; declaration of public interest. It is hereby declared that the business of transporting natural gas within the state by *interstate or intrastate natural gas pipeline companies* is affected with the public interest and that the health, safety, and welfare of the inhabitants of the state require

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regulation in matters relating to the transportation of natural gas to the extent hereinafter provided."

The only companies so engaged were at that time so-called foreign corporations. It is hardly necessary, however, to resort to such interpretation since the provisions of § 1086b are sufficiently broad to include any company within the purview of § 5640.

Algonquin has also filed its certificate of incorporation pursuant to § 5248, General Statutes, has filed proof of solvency with the secretary of the state, and is otherwise qualified to do business in Connecticut. Although not raised at the hearing, the record shows that Algonquin is authorized to conduct the business of a natural gas transmission company by the terms of Chap 264a, 1951 Supplement to the General Statutes, and hence has complied with the provisions of § 5247 of the General Statutes which prohibits foreign corporations from engaging in any of the classes of business excepted in § 5151 of the General Statutes, included in which exceptions is a gas business or any company requiring the right to take and condemn lands or to occupy the public highways of this state. It is evident from these facts that Algonquin has in fact complied with all statutory conditions precedent to doing business in the state, and under sound legal theory as well as for practical considerations, it is evident that it is included within the class of corporations, to which the provisions of § 5640 through § 5642 are intended to apply.

The allegation of the town of Danbury that Algonquin does not possess a certificate of public convenience and necessity from the Federal Power

Commission is based on the opinion of the United States circuit court of appeals for the third circuit, filed April 4, 1952, as amended April 22, 1952, in *Northeastern Gas Transmission Co. v. Federal Power Commission*, 95 PUR NS —, —, 195 F2d 872, 882, which found:

"The following orders of the Federal Power Commission will be set aside and for nothing holden:

"(1) The order entered in the Commission's Docket G-1568 on January 10, 1951.

"(2) The order entered in the Commission's Docket G-1319 on January 10, 1951.

"(3) The order entered in the Commission's Docket G-1012 on January 10, 1951.

"(4) Paragraph C of the Commission's opinion and order No. 206 issued February 27, 1951.

"Paragraph B of the Commission's opinion and order No. 206 issued February 27, 1951, will be modified by eliminating from the certificate of public convenience and necessity issued to Texas Eastern Transmission Corporation by said paragraph any authorization to Texas Eastern to sell and deliver natural gas to Algonquin Gas Transmission Company.

"All of these matters will be remanded to the Commission for further proceedings not inconsistent with this opinion."

It is the contention of the town of Danbury that the above-quoted order of the United States circuit court of appeals had the effect of revoking Algonquin's certificate. It is a matter of record in this proceeding, however, that the rules of the United States circuit court of appeals provide that upon

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the filing of a petition for a writ of certiorari to the United States Supreme Court the effect of the order reversing the Power Commission's order is stayed. We find, therefore, that the certificate of public convenience issued by the Federal Power Commission to Algonquin is still in full force and effect pending the outcome of the appeal before the United States Supreme Court. (See also *Algonquin Gas Transmission Co. v. Becker*, Case No. 86575, superior court, Fairfield county June 5, 1952.)

At the hearing, the Commission denied the motion of the town of Danbury to dismiss the proceeding on the basis of lack of jurisdiction. For the reasons above enumerated, the Commission reaffirms this denial.

The Issues

A. The Aggrievement

Algonquin alleges that it is aggrieved by virtue of the delay caused by the alleged refusal of the town of Danbury to grant it permits to cross certain streets in the town. At the hearing, five other road crossings for which authority was desired to make excavations were brought in issue. It is the contention of Algonquin that authority has been received to effect immediate entry on all properties concerning which there exists any controversy with respect to the extent of damages to be awarded as a consequence of condemnation proceedings and that all other rights of way or easements have been secured throughout Connecticut. It also points out that the added costs of constructing pipeline facilities without a continuity of right of way adds much to the cost of the entire line. Of the 246 miles of

its proposed line Algonquin has completed 191 miles, leaving approximately 55 miles to be completed, of which 7 are in Danbury. As of July 31, 1952, it was the testimony that \$31,500,000 has been spent by Algonquin, of which the witness estimated between seven and eight million had been expended in Connecticut. The daily interest payment to bond holders for funds used to finance the construction approximates \$4,000 per day. It appears that Algonquin now proposes to complete its pipeline by October 15, 1952, and has so informed distributing company customers to whom it will sell and deliver natural gas.

Algonquin proposes under its certificate to serve the cities of Waterbury, New Haven, Hartford, New London, Willimantic, Putnam, Norwich, and Mystic in Connecticut; and Boston and Providence, among other cities in Massachusetts. We have taken administrative notice of the reports made in the ordinary course of business by Connecticut gas distributing companies to this Commission respecting the adequacy of existing manufactured gas facilities in this state to provide for peak demands during a prolonged period of severe winter weather. These facilities would be taxed to their limits if required to meet these demands during the coming winter. Because of the absence of construction of additional facilities for manufacturing gas which would have been built but for the advent of natural gas, it is clear that a delay in construction of Algonquin's pipeline which will provide the means of alleviating this critical shortage, in Connecticut at least, would react against the public interest and hence constitute

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an aggrievement not only to Algonquin but to the gas distributing companies and to the consumers in the state of Connecticut.

We have also taken administrative notice of the large expenditures by the distributing companies which will be supplied by Algonquin, made for the purpose of constructing facilities to bring the natural gas from the lines of Algonquin to the distribution system of the companies and to adopt their systems to its use. Large sums have been borrowed for the purpose of financing this construction as well as for financing conversion from manufactured to natural gas. The delay in bringing natural gas to these companies increases their costs since they must continue to distribute the more expensive manufactured gas while at the same time bearing the burden of servicing the carrying charges on the additional capital required to finance the expansion and conversion of the facilities needed for the use of natural gas. A further delay is, therefore, clearly contrary to the public interest.

We find, on the basis of the above recital of facts, that at the time of the filing of the petition by Algonquin it was in fact aggrieved and suffered a delay in point of time and will continue to suffer such a delay which will react with pecuniary disadvantage to Algonquin and is contrary to the public interest.

B. The Refusal

[4] The town of Danbury relies on the contention that there has been in fact no refusal but that a decision was merely deferred pending the determination by the town meeting. It claims that the selectmen of the town have no power to grant permits to make ex-

cavations in public highways and allow Algonquin to lay its pipelines therein on the theory that such an act is properly the subject of a town meeting decision only and is beyond the authority of the selectmen. It argues that, in accordance with § 2117, the town meeting, not the selectmen, is the authority having jurisdiction over the maintenance of the highways, and maintains that the selectmen were at all times, and continue to be, willing to submit to the town meeting the question of granting permits as required by Algonquin, once the matter of disputes with landowners in the town of Danbury respecting damages for the acquisition of rights of way are settled. At the hearing, counsel for the town of Danbury indicated that with the conclusion of the litigation respecting Algonquin's right of immediate entry, the town selectmen were now willing to submit the matter to a town meeting. This, it was asserted, could be done on five days' notice.

The applicable provisions of the General Statutes, however, state clearly that an application for authority to open or make an excavation in a portion of the public highway by a public service company shall "if required by the authority having jurisdiction over the maintenance of such highway" be made to such authority. There is abundant evidence in the General Statutes that the authority having jurisdiction over the maintenance of the highways in a town in which there is no specifically appointed superintendent of streets or highways is the board of selectmen.

Chapter 105 of the General Statutes, Revision of 1949, is concerned with highways, bridges, and ferries, and sec-

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tion after section of this chapter places the jurisdiction of town roads squarely on the selectmen. Under § 2127, the *selectmen* may be compelled to make improvements as may be necessary by order of the county commissioners. Under § 2132, the *selectmen* have duty to keep the road open and prevent it from being impassable from an accumulation of snow. Under the provision of § 2138, it is the *selectmen* to whom is given the right to lay out necessary roads, and the *selectmen* are the ones in § 2147 who are given authority to discontinue existing highways. Section 2152 authorizes the *selectmen* to appropriate material from individual owners of certain property for use in making and repairing highways. The determination of boundaries of the road is given to the *selectmen* under § 2166. (Emphasis supplied.)

The principal purpose and effect of Title 105, "Highways and Bridges," more particularly of § 2117, on which Danbury relies, is to authorize a town, as opposed to the state, to lay out, construct, and repair streets, to appropriate money therefor, and particularly to fix liability in the event of failure to repair a street. There appears nowhere an inference that the language was intended to do anything more definite. The legislation was required if towns were to be made responsible for repairs of streets, since the duty of maintenance of highways is normally a function of the state. It may impose this duty on whom it chooses, however, and since as early as 1672, the burden of maintaining highways has been placed on the towns with certain exceptions not here relevant, *DeCapua v. New Haven* (1940) 126

Conn 558, 560, 13 A2d 581. That this specific delegation must be done by statute is evident when it is remembered that at least since *Baldwin v. North Branford* (1864) 32 Conn 47, it has been held that towns in Connecticut have no so-called inherent powers but must rely on specific legislative delegations. That this was in fact the case has been decided by a long line of well-reasoned cases. Reference need only be made to *Makepeace v. Waterbury* (1902) 74 Conn 360, 50 Atl 876, wherein the entire legislative history of the subject is traced and to *Smith v. Milford* (1914) 89 Conn 24, 30, 92 Atl 675.

None of the decisions even imply, however, that, in addition, § 2117 made the maintenance of public streets a responsibility of the entire townspeople to be discharged only by a town meeting. On the contrary, the selectmen of the towns have always been considered the agents of the town in carrying out the duty of repairs and maintenance imposed by statute, *Malloy v. Huntington* (1894) 64 Conn 88, 100, 29 Atl 245, and in doing so have been held to have a right to exercise their discretion as to the time when they would perform the repairs, *Atwood v. Partree* (1887) 56 Conn 80, 82, 14 Atl 85.

It would accordingly be contrary to the expressed intent of the general assembly, as interpreted by the supreme court of errors, to stretch the meaning of § 2117 to the extent urged by Danbury.

Danbury argues further, however, that in this particular exercise of authority the selectmen cannot give a permit to open streets because to do so would be a conveyance of interest in

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land owned by the townspeople and properly the function of the townspeople expressed through a town meeting only. The application by Algonquin requires only a permit for opening and not a right of way or easement. In fact, it is doubtful that the town could convey any greater interest since a town as such does not ordinarily have a sufficient quantum of title in the land on which roads are built to support such a conveyance. "The town as such has no title or lien upon or right of property in a town highway." *Dawson v. Orange* (1905) 78 Conn 96, 117, 61 Atl 101.

The granting of permits for excavation and laying of utility lines, however, is something entirely different from a conveyance of right of way or interest in land. This power is similar to the licensing authority and is the exercise of the police power of the state. As to this power, there is no doubt that its exercise can be delegated by the general assembly to the town authority having jurisdiction over the maintenance over the highways which, as shown above, is the selectmen. We, therefore, reject this argument. We find that the board of selectmen is the authority having jurisdiction over the maintenance of the highway and that it is the proper body before which to bring the request for permits for opening the highways in question.

After the conclusion of the hearing, counsel for the town of Danbury transmitted a certified copy of a resolution adopted at a town meeting duly called and held in the town of Danbury to consider the issuance of permit involved in this proceeding. Because of our conclusions above, however, and because this proceeding was heard and

the finding made on the facts as developed at the hearing, no comment is made respecting such meeting.

There remains but one consideration, that is, whether the board of selectmen have in fact made a denial. There appears in the record a letter from the town counsel of Danbury, addressed to counsel for Algonquin, which states, among other things, as follows:

"You have been repeatedly advised by Mr. Sauer, first selectman of the town of Danbury, that he is not willing to issue a permit to lay and install your pipeline across the Hayestown school property, in the town of Danbury, unless and until he has been so instructed by a town meeting. This also applies to any and all town roads under which you propose to lay your pipeline."

There also appears uncontradicted testimony to the effect that on July 24, 1952, in a conversation with the superintendent of the land and legal department of Algonquin, the town counsel of the town of Danbury reaffirmed the town's position that (1) no permits would be given until a town meeting was held and that (2) no such town meeting would be held until all disputes with landowners in the town of Danbury were settled. We find, in the facts of record, that the above-cited actions and the uncontested fact that no permit has been issued, although the town of Danbury was first approached in January or February of 1952, is equivalent to a refusal as contemplated by § 5642.

C. Reasonableness of the Denial

We find on the basis of the above-recited conclusions that (a) the first

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reason advanced by the selectmen and the town counsel, that the town meeting, not the board of selectmen, was the proper party before whom to bring the request for permits, was based on an erroneous conclusion, was contrary to law and hence unreasonable and (b) that the second reason that no town meeting would be called or permit given until disputes with all landowners respecting dollar damages were settled was based on a premise immaterial to the issue and, therefore, was unreasonable.

Algonquin has complied with all applicable requirements of the General Statutes and of the rules of this Commission. The plans and specifications for the construction of the pipeline road crossings have been submitted in

evidence and have been carefully considered by the Commission. They appear to meet the requirements of this Commission's rules, regulations, and construction standards for high pressure gas transmission pipelines and we see no reason why the permit should not be granted. Acting under the provisions of § 5642, therefore, we find that Algonquin should be granted a permit to open and make excavations in the public highways which are in evidence in this proceeding and that such excavations should be carried out in strict accordance with the rules and regulations governing the construction and operation of natural gas pipeline companies contained in Docket No. 8612 of this Commission.

FEDERAL POWER COMMISSION

Re Allentown-Bethlehem Gas Company et al.

Docket No. G-1910
September 4, 1952

APPPLICATION by gas company for certificate authorizing acquisition of facilities of subsidiaries under a merger plan; approved.

Consolidation, merger, and sale, § 18 — Acquisition of gas facilities from subsidiaries.

An application by a gas company for authority to acquire and operate all of the facilities of several subsidiary companies under a proposed plan of merger, which application stated that the acquiring company would render all of the service "in exactly the same manner in which they are presently being operated and rendered," and that the merger plan would result in greater efficiency and economy, effect a tax saving, enable stockholders to hold directly their investment in the properties of the subsidiary companies, and remove the acquiring company from the status of a holding company, was approved, where it appeared that the state Commission had already ap-

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proved the plan of merger and that the acquisition was consistent with the present and future public convenience and necessity.

By the COMMISSION: On March 6, 1952, Allentown-Bethlehem Gas Company (Allentown), Consumers Gas Company (Consumers), The Harrisburg Gas Company (Harrisburg), Lancaster County Gas Company (Lancaster), and The United Gas Improvement Company (U.G.I.), hereinafter sometimes collectively referred to as applicants, filed a joint application, as supplemented and amended on April 18th, April 30th, and July 11th, 1952, pursuant to § 7 of the Natural Gas Act, 15 USCA § 717f.

Allentown, Consumers, Harrisburg, and Lancaster seek an order, pursuant to § 7(b) of the Natural Gas Act, permitting and approving the abandonment of certain facilities and services of the aforementioned companies, as hereinafter described.

The United Gas Improvement Company seeks a certificate of public convenience and necessity, pursuant to § 7 of the Natural Gas Act, authorizing it to acquire and operate all of the facilities and to render the services proposed to be abandoned by Allentown, Consumers, Harrisburg, and Lancaster, including the facilities of the Lebanon Valley Gas Company, under its proposed plan of merger.

Applicants (Allentown, Consumers, Harrisburg, and Lancaster) are subsidiaries of U.G.I., which is a holding company registered with the Securities and Exchange Commission. The aforementioned subsidiaries are cor-

porations organized and existing under the laws of the commonwealth of Pennsylvania and are engaged in the business of supplying and distributing a mixed gas in nine counties located in southeastern Pennsylvania, extending from the Susquehanna river eastward to the Delaware river. Lancaster serves straight natural gas in a portion of the area which it serves.

The proposal of the applicants will result in the complete dissolution of Allentown, Consumers, Harrisburg, and Lancaster, with U.G.I. performing all the present services and operations.

The facilities (all of which are located in southeastern Pennsylvania) and services which are proposed to be abandoned by applicants (Allentown, Consumers, Harrisburg, and Lancaster) and the facilities of Lebanon Valley Gas Company, all of which are proposed to be acquired by U.G.I., are set forth in its application, and include the following pipelines and services:¹

Allentown-Bethlehem Gas Company

Line from the 14-inch natural gas line of the Manufacturers Light and Heat Company to Allentown's distribution plant at Didier, which was certificated by the Commission's order issued December 19, 1949, in Docket No. G-1255, 8 FPC 426.

Lines from the distribution plant at Didier to Easton, Nazareth, Butztown, Bath, Allentown, Northampton, Greenawalds, Sterlingworth, Westcoesville, Emmaus, Macungie, Old

¹ The map attached to applicants' supplement filed on April 18, 1952, depicts the pipeline facilities proposed to be abandoned and all

facilities to be acquired under applicants' plan of merger.

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Zionsville, Vera Cruz, Hellertown, Center Valley, Richlandtown, Quakertown, Trumbauersville, Sellersville, Perkaspie, and Silverdale.

Lines from the distribution plant at Easton to the center of the bridge crossing the Delaware river through which gas is supplied to City Gas Company at Phillipsburg, New Jersey. The gas carried by such lines is sold by Allentown-Bethlehem Gas Company to City Gas Company of Phillipsburg, N. J., for resale by the latter company.

Consumers Gas Company

Line from the natural gas line of the Manufacturers Light and Heat Company near Millway to Consumer's distribution plant at Reading, which line was certificated by the Commission's order issued December 19, 1949, in Docket No. G-1256, 8 FPC 426.

Lines from the distribution plant at Reading to Temple, Fleetwood, Kutztown, Topton, Wernersville, Womelsdorf, Mohnton, Baumstown, Birdsboro, and Douglassville.

Lines from Womelsdorf to connection points with the lines of the Lebanon Valley Gas Company at the Lebanon county-Berks county line.

Line from Douglassville to the connection point with the line of the Philadelphia Electric Company near Pottstown.

The Harrisburg Gas Company

Line from the natural gas line of the Manufacturers Light and Heat Company near Billmeyer to Harrisburg's distribution plant at Steelton, which

line was certificated by the Commission's order issued December 19, 1949, in Docket No. G-1254, *supra*.

Lines from the distribution plant at Steelton to Hainton, Colonial Park, Harrisburg, Heckton, Enola, Shiremanstown, Mechanicsburg, Carlisle, New Market, Middletown, Royalton, Elizabethtown, and Marietta.

Line from Steelton to the connection point with the line of the Lebanon Valley Gas Company at the Dauphin county-Lebanon county line.

Lebanon Valley Gas Company

Lines from the connection point with the line of the Harrisburg Gas Company at the Dauphin county-Lebanon county line to Hummelstown, Palmyra, Campbellstown, Annville, Lebanon, and Avon.

Lines from the connection points with the lines of Consumers Gas Company at the Lebanon county-Berks county line to Myerstown, Richland, and Sheridan.²

Lancaster County Gas Company

i. Line from the natural gas lines of Texas Eastern Transmission Corporation to Lancaster;

ii. Line from the natural gas lines of Texas Eastern Transmission Corporation to Columbia;

iii. Line from the natural gas lines of the Manufacturers Light and Heat Company to Mount Joy;

iv. Line from the natural gas lines of the Manufacturers Light and Heat Company to Manheim;

v. Line from the natural gas lines of the Manufacturers Light and Heat Company to Lititz.³

² The facilities to be acquired from the Lebanon Valley Gas Company will be an integral part of U.G.I.'s proposed transmission pipeline system under the company's aforementioned plan of merger.

³ The facilities which Lancaster proposes to abandon were certificated by the Commission's order, issued December 19, 1949, in Docket No. G-1253, 8 FPC 426.

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Allentown (which also sells gas for resale to the City Gas Company of Phillipsburg), Harrisburg, and Lancaster are the sole distributors of gas in the communities and adjacent areas for which they are named; while Consumers is the sole distributor of gas in Reading, Pennsylvania, and adjacent areas. In addition, Consumers and Harrisburg provide all of the gas requirements of Lebanon Valley Gas Company, an affiliate, for resale in adjacent areas.

Upon acquisition of the above-described facilities, U.G.I. proposes to continue operation of all of such facilities and to render all the services "in exactly the same manner as they are presently being operated and rendered," except that upon consummation of the merger there will no longer be any sale for resale to the Lebanon Valley Gas Company by either Harrisburg or Consumers.

Sale now being made by Allentown to City Gas Company of Phillipsburg, N. J., will now be made by U.G.I. Upon receipt of the authorization herein sought, U.G.I. proposes to seek cancellation of the tariffs covering sales to Lebanon Valley Gas Company and to file a new tariff covering sale of gas to City Gas Company of Phillipsburg, which tariff will be identical to the tariff now on file, with the exception that the name "The United Gas Improvement Company" will be substituted for that of "Allentown-Bethlehem Gas Company."

Allentown, Consumers, Harrisburg, and Lancaster purchase their natural gas supply from the Manufacturers

Light and Heat Company. In addition, Consumers also purchases natural gas from the Philadelphia Electric Company.⁴ Deliveries of natural gas to Allentown, Consumers, Harrisburg, and Lancaster were authorized by the Commission in its order issued June 1, 1948, Re Philadelphia Electric Co. Docket No. G-1030, 7 FPC 671, and Re Manufacturers Light & Heat Co. Docket No. G-1247, by order of the Commission issued December 19, 1949, 8 FPC 426.

Pursuant to due notice, a public hearing was held in Washington, D. C., on August 29, 1952, respecting the matters involved and the issues presented by the application. No protest to the application has been received.

The United Gas Improvement Company states that its proposed plan of merger is for the purpose of achieving greater efficiency and economy in the operation of its facilities, to effect a tax saving, to enable its stockholders to hold directly their investment in properties of the subsidiary companies and to remove U.G.I. from the status of a holding company. The proposed plan provides for the following: (1) Conversion of U.G.I. into a Pennsylvania public utility company, (2) merger into U.G.I. of its public utility subsidiaries and dissolution of its one hundred per cent controlled nonutility subsidiaries, and (3) disposal of all investments in other companies, with the exception of a note issued by the Delaware Coach Company in the amount of \$916,666.67.

The United Gas Improvement Company will carry out part one of the plan by taking over the operation of the Northern Liberties Gas Company

⁴ The gas delivered to Consumers by Philadelphia Electric Company is a mixture of natural and manufactured gas.

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properties which are presently operated by the Philadelphia Gas Works Company. Part two of the plan will be effected by the merger into U.G.I. of its seven subsidiaries⁵ whereupon U.G.I. will remain the only surviving corporation. All assets and liabilities of the subsidiaries will be taken up by U.G.I. and all rights of the subsidiaries will be vested in U.G.I.

It is proposed that no securities will be sold and all securities issued are to be exchanged for outstanding securities of the subsidiary companies. The subsidiaries now have outstanding seven series of bonds in the principal amount of \$15,758,000, which bear various interest rates. It is intended that these bonds will be exchanged

for identical amounts of the new bonds to be issued by U.G.I. with the same interest rates, maturities, redemptions, and similar provisions contained in the now outstanding bonds.

Under part three of the plan, U.G.I. proposes to dispose of all of its holdings in other companies within one year, with exception of the note of the Delaware Coach Company in the amount of \$916,666.67. It is the contention of U.G.I. that disposition of this note can be made only at a sacrifice.

After consummation of the proposed plan, the capital structure of U.G.I. will be comprised of debt, preferred stock, and common equity, as follows:

Long-term Debt	\$17,598,000	25.3%
Preferred Stock	2,500,000	3.6%
Common Equity:		
Common Stock	\$18,146,727	
Earned Surplus	28,503,571	
Capital Surplus	2,869,475	
	49,519,773	71.1%
	<u>\$69,617,773</u>	<u>100.0%</u>

The Pennsylvania Public Utilities Commission, by its order dated June 16, 1952, has approved the plan of merger as outlined herein.

The United Gas Improvement Corporation's comprehensive plan, "which includes its proposed merger" as filed with the Securities and Exchange Commission, after hearings, is now awaiting decision.

The Commission finds:

(1) Allentown, Consumers, Harrisburg, and Lancaster own and operate, among other facilities, a natural gas transmission pipeline system lo-

cated in the state of Pennsylvania, and by such operations the aforementioned applicants are engaged in the transportation of natural gas in interstate commerce, subject to the jurisdiction of the Commission and are, therefore, "natural-gas companies" within the meaning of the Natural Gas Act, as heretofore found by the Commission's orders issued December 19, 1949, in Docket Nos. G-1253, G-1254, G-1255, and G-1256, 8 FPC 426. Of the aforementioned companies, Allentown, Consumers, and Harrisburg are also engaged in the sale of

⁵ Allentown-Bethlehem Gas Company, Consumers Gas Company, The Harrisburg Gas Company, Lancaster County Gas Company,

Lebanon Valley Gas Company, Luzerne County Gas & Electric Corporation, and the Philadelphia Gas Works.

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natural gas in interstate commerce for resale for ultimate public consumption.

(2) The properties described above, all as more fully described in the joint application, as supplemented and amended, in Docket No. G-1910, include facilities used in the transportation of natural gas in interstate commerce and in the sale in interstate commerce of natural gas for resale for ultimate public consumption, and the abandonment, under the plan of merger here proposed, of such facilities to the United Gas Improvement Company is subject to the requirements of subsection (b) of § 7 of the Natural Gas Act; similarly, their acquisition and operation by U.G.I. are subject to the requirements of subsections (c) and (e) of § 7 of the Natural Gas Act.

(3) The proposed abandonment by the applicants (Allentown, Consumers, Harrisburg, and Lancaster) of the natural gas facilities hereinbefore enumerated, and the acquisition and operation thereof by the United Gas Improvement Company are in the public interest; and permission and approval to abandon, and authorization to acquire and operate the same should be given as hereinafter ordered and conditioned.

(4) It is necessary and in the public interest for carrying out the provisions of the Natural Gas Act that appropriate action be taken to modify the orders of the Commission in Docket Nos. G-1030, 7 FPC 671, and G-1247, 8 FPC 426, to effectuate the transfer of the gas supply of Allentown, Consumers, Harrisburg, and Lancaster to their successor in inter-

est, the United Gas Improvement Company.

(5) The United Gas Improvement Company, a Pennsylvania corporation, will, upon the acquisition and operation of the facilities above referred to, be engaged in the transportation and sale of natural gas in interstate commerce and will, therefore, be a "natural-gas company" within the meaning of the Natural Gas Act.

(6) Applicant U.G.I. is able and willing properly to do the acts and to perform the services proposed and to conform to the provisions of the Natural Gas Act and the requirements, rules, and regulations of the Commission thereunder.

(7) Applicant having requested the omission of the intermediate decision procedure and all the requirements of the provisions of § 1.32 (b) of the Commission's Rules of Practice and Procedure [18 CFR 1.32 (b)] having been satisfied, sufficient cause exists for the Commission forthwith to render its final decision in the instant proceeding.

(8) The present and future public convenience and necessity permit the abandonment under the plan of merger here proposed of the facilities of Allentown, Consumers, Harrisburg, and Lancaster, described herein.

(9) The acquisition and operation by the United Gas Improvement Company of the facilities described herein and more fully set forth in its application, are required by public convenience and necessity, and a certificate therefor should be issued as hereinafter ordered and conditioned.

The Commission orders:

(A) Allentown, Consumers, Harrisburg, and Lancaster be and they

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are hereby granted permission and approval to abandon, under the proposed plan of merger above referred to, the facilities herein described, all as more fully set forth in the joint application, as supplemented and amended, filed by the aforementioned companies in this proceeding.

(B) A certificate of public convenience and necessity be and it is hereby issued to the United Gas Improvement Company to acquire and operate the facilities described above for the transportation and sale of natural gas for resale, all as more fully described in its application, as supplemented and amended, subject to the jurisdiction of the Commission upon the terms and conditions of this order.

(C) The United Gas Improvement Company shall file the necessary motions to modify the Commission's orders issued in Docket Nos. G-1030 and G-1247, *supra*, to achieve the modification referred to in finding (4) above, within thirty days after the date of issuance of this order, unless extended by further order of the Commission.

(D) The United Gas Improvement Company shall, prior to commencement of the service herein authorized, file with the Commission a tariff and service agreement covering its proposed sale to the City Gas Company of Phillipsburg, New Jersey, which tariff shall include a rate not in excess of that presently charged by Allentown-Bethlehem Gas Company and shall provide the same terms and conditions of service.

(E) The United Gas Improvement Company shall file appropriate accounting entries recording the acquisition of the property of its predecessors

in interest, above referred to, in conformity with the provisions of the Commission's Uniform System of Accounts Prescribed for Natural Gas Companies.

(F) The United Gas Improvement Company shall report to the Commission, in writing and under oath, within thirty days from the effective date of this order, unless extended by further order of the Commission, the date of the abandonment of the facilities herein described and the date of acquisition and commencement of operation by the United Gas Improvement Company.

(G) The certificate granted to the United Gas Improvement Company is granted upon condition that U.G.I.'s comprehensive plan of merger be approved by the Securities and Exchange Commission, and the grant of the authorization herein shall be without prejudice to any action which may be taken by that Commission.

(H) The authorization contained in paragraphs (A) and (B) hereof shall be deemed to be effective only upon a modification of the orders in Docket Nos. G-1030 and G-1247, *supra*, so that U.G.I. will become the recipient of the deliveries of natural gas presently supplied to its subsidiary companies (Allentown, Consumers, Harrisburg, and Lancaster) by Philadelphia Electric Company and the Manufacturers Light and Heat Company.

(I) The certificate issued hereby to the United Gas Improvement Company is not transferable, and shall be effective only so long as it shall continue the operations hereby authorized in accordance with the provisions of

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the Natural Gas Act and any pertinent rules, regulations, or orders here- tofore or hereafter issued by the Commission.

NORTH CAROLINA UTILITIES COMMISSION

Town of Spring Lake

v.

Spring Lake Enterprises, Incorporated

Docket Nos. W-2, Sub 2; W-2, Sub 3
June 18, 1952

REQUEST by consumer for reduction of water and sewer rates, and application of water company to establish rates for hydrant rental and fire protection service; rate reduction ordered and application to establish rate for hydrant rental and fire protection service dismissed.

Return, § 11 — Original cost basis — Actual value basis — Overdevelopment factor.

1. A water company's rates should be based on the actual value of such property as is devoted, or needs to be devoted, to public service, rather than on the full value or original cost, where the company purchased its plant from the United States Government for less than its original cost and where only a portion of the property is actually needed to provide necessary water and sewer services to meet the public needs, p. 88.

Valuation, § 211 — Rate base determination — Overdevelopment factor.

2. A water company's rates should be based on the actual value of such property as is devoted or needs to be devoted to public service, where a portion of the company's property is in excess of that required to serve all reasonable needs, and in excess of that presently devoted to public service, p. 88.

Return, § 115 — Water company.

3. A return of 6.50 per cent was considered fair and reasonable to both a water company and its ratepayers, p. 90.

APPEARANCES: Lester C. Carter, Attorney at law, Fayetteville, for the Town of Spring Lake; Buford T. Henderson, Attorney at Law, Winston-Salem, for Spring Lake Enterprises, Inc.; Honorable John Hill Paylor, Assistant Attorney General,

state of North Carolina, Raleigh, for the state of North Carolina.

McMAHAN, Commissioner: In this proceeding an application has been made to the Commission by the town of Spring Lake asking that the Com-

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mission require a reduction in rates now charged for both water and sewer, to citizens of Spring Lake who use said water for domestic and commercial purposes, by Spring Lake Enterprises, Inc., which holds a franchise to transmit and sell water for all purposes in the town of Spring Lake, North Carolina. Sprink Lake Enterprises, Inc., has also petitioned the Commission to establish a rate for hydrant rental, and for water to be used for fire fighting, to be charged by said company to the town of Spring Lake. It developed at the hearing that the town of Spring Lake has no desire to purchase or use water from the Spring Lake Enterprises, Inc., for fire-fighting purposes, and thus it now appears that there is no reason why rates and charges should be set for hydrant rental or for water used for fire-fighting purposes, and thus the proceeding in so far as the application of Spring Lake Enterprises, Inc., is concerned is dismissed; and the Commission also holds that Spring Lake Enterprises, Inc., is under no obligation to furnish water for fire-fighting purposes in the town of Spring Lake.

During the course of the hearing many complaints were called to the attention of the Commission, by the officials of the town of Spring Lake, concerning certain alleged practices of the water company. It was contended also that said company has discriminated against some of its customers, and favored others in certain respects, particularly in the method used to charge for water used. The Commission has directed its administrative staff to investigate all such complaints, and to require any and all corrections that may be necessary to

insure fair and equitable treatment of all customers of the water company; and by this order the Spring Lake Enterprises, Inc., is directed to dispense, measure, and charge for water to its customers and users only in accordance with the approved rates and charges attached to this order as Appendix "A" and "B." [Appendix "A" and Appendix "B" omitted herein.]

The principal contention made by the town of Spring Lake herein is that Spring Lake Enterprises is now being permitted to charge rates to its customers for water that are in excess of what should be sufficient to produce revenues to pay its operating expenses, and give it a fair and reasonable rate of return on its property that is devoted to public service. On the other hand the company contends that its present rates are fair and reasonable, and that it is now earning only a reasonable return on the true value of its property devoted to public service. The question with respect to the contentions made hinges upon what the proper rate base is against which the company is entitled to earn a fair and reasonable return.

[1,2] An audit of the company's books reveals that the total net investment in water and sewer utility plant, plus allowance for working capital, and after deducting appropriate reserves and contributions, and after pro forma adjustments, as of December 31, 1951, amounts to \$142,776.-11. The evidence before the Commission, and all the records indicate that this is based upon what the original cost of constructing the plant was, less the appropriate reserves and contributions such as reserve for depreciation. On the other hand it is admitted by

SPRING LAKE v. SPRING LAKE ENTERPRISES, INC.

the Spring Lake Enterprises, Inc., and those who own the stock in said company, that this plant was acquired by purchase from the United States Government in 1947, by three individuals who paid \$22,500 for the entire plant, and that the present owners acquired the common stock of the company in 1949, along with the assumption of certain liabilities by way of bank loans, for \$48,011.11. The company contends that it is entitled to earn a rate of return on the amount originally invested in the plant, less appropriate reserves, that is on the \$142,776.11, while the town of Spring Lake contends that it should earn only a reasonable rate of return on what the present owners actually paid for the property.

The evidence before the Commission shows that a portion of the property acquired by Spring Lake Enterprises, Inc., is neither necessary, nor actually being used by said company in furnishing water and sewer services to the users thereof in Spring Lake. The plant as originally designed and constructed by the Federal government was such as might be needed to provide service to a much larger community than actually exists at Spring Lake. The Commission does not question the actual value of the entire property, and there is no doubt but that it is well worth the entire sum of \$142,776.11, yet on the other hand it cannot be questioned but that only a portion of the property is actually needed to provide necessary water and sewer services to meet the needs of the town of Spring Lake in the foreseeable future. Had the present owners paid full value for the property there would be good argu-

ment for their right to earn on the entire investment; and likewise if the entire property was needed to provide adequate service to supply the needs of the users of such services, it would be just and proper to allow the company to earn on the full value of the property, regardless of the fact that they acquired it at a figure far less than its worth, or original cost. On the other hand since only a portion of the property is actually needed to serve the needs, and since the owners acquired it at a price far less than the original cost, or present value, the users of the service should not be required to pay a rate sufficient to earn a reasonable return on the full value, or original cost, and it is the opinion of the Commission that such rates should be based on the actual value of such property as is devoted, or needs to be devoted, to public service; that is to supply the present needs, and those of the foreseeable future. The Commission has thus eliminated from the original cost or investment in water properties an amount of \$17,995.72, this sum representing the engineering staff of the Commission's estimate of the cost of the facilities existing for the purpose of fire protection, as compared with a reasonable investment in facilities which are actually devoted to public service at the present time. We have also excluded from the base an additional amount of \$32,243.70 which represents the staff engineering estimate of the portion of the sewer properties which is in excess of that required to serve all reasonable needs, and in excess of that presently devoted to public service. This represents a combined total of extra investment amounting to \$50,-

NORTH CAROLINA UTILITIES COMMISSION

239.42, which the Commission is eliminating from the rate base as being excessive of reasonable needs. After eliminating this said amount from the rate base it necessarily follows that the depreciation reserve balance must be adjusted. This adjustment decreases the depreciation reserve by \$14,625.57, and when taken with the adjustment in gross investment reduces the company's net investment in water and sewer plant by the extent of \$35,613.85. Thus on this basis the total net investment in water and sewer utility plant, plus allowance for working capital, and less depreciation and contributions, which this company has in utility plant devoted to public service, amounts to \$107,162.20, which said figure the Commission finds to be a proper, just, and reasonable rate base upon which the company should be allowed a reasonable rate of return.

[3] The Commission finds that the gross operating revenue of Spring Lake Enterprises, Inc., for the twelve months ending December 31, 1951, was \$34,960.75; that after adjusting its operating revenue deduction by appropriate change in depreciation, adjustment of its taxes, both Federal income and other, and after the disallowance of an item referred to as officers' expenses in the amount of \$2,375, that its total operating revenue deduction for said period is \$24,756.46, and that thus its net operating income for return amounted to \$10,204.29. This when applied against its

net investment in water and sewer utility plant, plus allowance for working capital, found to be appropriate as above set forth, and in the sum of \$107,162.22, produces a rate of return of 9.2 per cent. The Commission finds that such a rate of return is excessive.

Under the facts and circumstances existing in this case, we find, and so hold that a rate of return of 6.50 per cent on a rate base of \$107,162.26, is fair and reasonable to both the Spring Lake Enterprises, Inc., and its ratepayers. In order to bring the rate of return down to this point it is necessary to reduce the gross annual revenues of the company by \$5,236.44. Attached hereto and marked as Appendix "A" and Appendix "B" [omitted herein] is a schedule of rates that will produce such results, and the Commission finds such rates to be proper.

It is therefore *ordered* that rates and charges set forth and designated as Appendix "A" and Appendix "B" [omitted herein] be immediately put into effect throughout the entire system of the Spring Lake Enterprises, Inc., and that said company be, and it is hereby, authorized to charge said rates, and it is directed to strictly adhere to the same in all respects without any exceptions.

It is *further ordered* that a copy of this order be transmitted, under the seal of this Commission to the town of Spring Lake, Spring Lake Enterprises, Inc., and all attorneys appearing in this cause.

Boston Consolidated Gas Company

v.

Department of Public Utilities

— Mass —, 106 NE2d 684

June 12, 1952

BILL IN EQUITY by gas company for annulment of Commission order disallowing proposed rates and authorizing new and lower rate alleged to be confiscatory; order annulled.

Appeal and review, § 53 — Interlocutory decree after rescript — Exact accordance with rescript.

1. An appeal from an interlocutory decree after rescript must be dismissed where the decree was in exact accord with the rescript, p. 93.

Procedure, § 32 — Recommittal of case to hear specific testimony — Right to re-open entire case.

2. The recommittal of a gas rate suit to a master for specific purposes does not reopen the whole case and gives the Department no right to reargue matters decided previously, p. 93.

Appeal and review, § 74 — Recommittal of case to master — Duty to report evidence.

3. A master, upon a decree of recommittal of a gas rate case that did not require a report of evidence, did not have the duty to report such evidence, except in so far as it might be necessary to enable the court to judge of the correctness of his rulings upon points of evidence and procedure raised during the course of the hearing, p. 93.

Appeal and review, § 41 — Recommittal of case to master — Right to report evidence.

4. Since an order of recommittal to a master did not authorize him to report evidence, the court on appeal could not consider evidentiary matter appearing in an appendix annexed to the master's report, p. 93.

Appeal and review, § 68 — Final decree — Revision of interlocutory decree where not appealed.

5. Since there was no appeal from an interlocutory decree confirming a master's report on recommittal, the interlocutory decree was open to revision on appeal from the final decree so far only as it appeared to the full court that the final decree was erroneously affected thereby, p. 93.

MASSACHUSETTS SUPREME JUDICIAL COURT

Return, § 52 — Confiscation — Gas company.

6. A Department order permitting a gas company to file rates which would allow a return of only about 1.26 per cent was confiscatory, p. 94.

APPEARANCES: R. H. Holt, Boston, J. P. Rooney and A. P. Schmidt, Boston, for the petitioner; D. H. Stuart, Assistant Attorney General, for the respondent.

Before Qua, CJ., and Lummus, Ronan, and Spalding, JJ.

QUA, CJ.: This is a bill in equity under GL (Ter Ed) Chap 25, § 5, for the annulment as confiscatory of an order of the Department entered September 28, 1948, disallowing a schedule of rates for gas which had been filed by the company, and permitting it to file new and lower rates.

When the case was here before, *Boston Consol. Gas Co. v. Department of Public Utilities* (1951) 327 Mass 103, 90 PUR NS 259, 97 NE2d 521, it appeared from the master's first report that, in order that the company might operate successfully, maintain its financial integrity, attract capital, and compensate its investors properly for the risks involved, it must earn for interest and dividends not less than 6.25 per cent on a rate base of \$45,000,000; but that the rates proposed by the company itself would fall far short of producing such earnings and would produce on an annual basis only about \$400,000 more than the rates permitted by the Department. 327 Mass at p. 111, 90 PUR NS at p. 265. Why the company did not seek a larger return has never, so far as we know,

been explained in this litigation and is immaterial now. Good reasons may have existed. It further appeared from the first report that the company operated a business of selling gas appliances and charged to its business of selling gas certain expenses for salesmen, clerk hire, and advertising which in our opinion ought to have been charged to the appliance business and ought not to have been included in the expenses of selling gas. 327 Mass at pp. 108-112, 90 PUR NS at pp. 263-265. We took the view that, although the rates asked for by the company would produce far less than it required, it could not complain of confiscation if the rates permitted to it would, after correction of the improper charges, produce as great a return as would the rates filed by it. Since from the facts then before us we could not tell that correction of the improper charges would not result in wiping out the difference of \$400,000 and showing a return from the gas business as great as that of the rates filed, we ordered that the Department's thirty-fifth exception to the master's first report, the only exception directed against the improper charges, be sustained and that the cause be recommitted to the master to report the amount of expenses for salesmen, clerk hire, and advertising properly allocable to the gas business and to the appliance business. These were the only expenses which appeared from that part of the master's first report to

BOSTON CONSOL. GAS CO. v. DEPT. OF PUB. UTIL.

which the Department's thirty-fifth exception referred to have been wrongly charged to the gas business. We also ordered that the master be directed to report "whether any significant portion of the company's invested capital has been withdrawn from the service of the public in the gas business for purposes of the appliance business, and if so, how much" 327 Mass at p. 113, 90 PUR NS at p. 266, 97 NE2d at p. 527. The purpose of this last order was to ascertain whether the separation in the accounting between the gas business and the appliance business would involve any changes in the rate base of sufficient consequence to be considered. Except as affected by the sustaining of the Department's thirty-fifth exception, we directed that the master's first report, together with a second or "supplementary" report dealing with a minor matter not now important, be confirmed.

[1] Upon the filing of the rescript of the full court, the single justice entered an interlocutory decree after rescript, from which the Department filed an appeal. Since the decree was in exact accord with the rescript, this appeal must be dismissed. *Carilli v. Hersey* (1939) 303 Mass 82, 85, 20 NE2d 492.

[2] The recommitment to the master for the specific purposes hereinbefore enumerated did not reopen the whole case. It gave the Department no right to reargue matters decided when the case was here before. No case could be ended if each new step in the course of the proceeding were to be

treated as a new beginning of the whole case. The duties of the master and the rights of the parties on recommitment were strictly limited by the terms of the interlocutory decree recommitting the cause. It is obvious from the master's third report that he understood the nature of his duties under the decree of recommitment and has performed them according to the decree.

Upon the coming in of the master's third report the single justice entered an interlocutory decree overruling the exceptions of both parties to that report and confirming the report, and a final decree annulling the order of the Department of September 28, 1948. The Department appeals from the final decree only. The company appeals from the interlocutory and final decrees, and also from an interlocutory decree denying its motion to strike a portion of the master's report.

[3-5] The Department filed twenty-five objections to the master's third report. Upon the filing of the report these objections automatically became exceptions. Equity Rule 26, 252 Mass 608. Many of them do not briefly and clearly specify the matters objected to and the cause thereof as required by the rule. Others complain of the refusal of the master to go beyond the scope of the recommitment. Still others are based upon evidence not reported by the master. The decree of recommitment did not require the master to report evidence, and it was not his duty to do so, except in so far as might be necessary

MASSACHUSETTS SUPREME JUDICIAL COURT

to enable the court to judge of the correctness of his rulings upon points of evidence and procedure raised during the course of the hearing before him. *Cook v. Scheffreen* (1913) 215 Mass 444, 102 NE 715; *Smith v. Lloyd* (1916) 224 Mass 173, 112 NE 615; *Spiegel v. Beacon Participations* (1937) 297 Mass 398, 406, 8 NE2d 895. The master does refer to a so-called "Appendix" annexed to the Department's objections containing a transcript of "a substantial portion" of the evidence, which, however, is "to a substantial extent fragmentary and incomplete." The master declined to report this "transcript," but did seek to report his rulings on evidence as set forth in the "transcript." The "transcript" was not reported generally, and if it had been it could not be considered for the purpose of giving life to the Department's exceptions, since the master was not authorized to report the evidence, much less fragments of the evidence presented to him by one side in the litigation. *Lindsay v. Swift* (1918) 230 Mass 407, 409, 119 NE 787; *Joyner v. Lenox Savings Bank* (1947) 322 Mass 46, 57, 58, 76 NE2d 169, and cases cited. The "transcript," even if we assume that it was proper for the master to use it as a vehicle for reporting his rulings on evidence, cannot be considered in connection with the department's exceptions on questions of evidence, because the Department did not appeal from the interlocutory decree confirming the master's report. That decree was therefore open to revision on the appeal from the final decree "so far only as it appears to the full court" that the final decree was "erroneously affected thereby." GL

(Ter Ed) chap 214, § 27. It does not appear that the final decree was erroneously affected by any rulings of the master on questions of evidence. *Fay v. Corbett* (1919) 233 Mass 403, 409, 410, 124 NE 73; *Canning's Case* (1933) 283 Mass 196, 199, 186 NE 243; *Arey v. George Associates* (1937) 299 Mass 130, 132, 12 NE 2d 84; *Regan v. Tierney* (1940) 306 Mass 168, 27 NE2d 698. It could also be said of others of the objections that the action of the master complained of does not appear to have erroneously affected the final decree. It does not seem to us that any of the findings of the master were based upon guesswork or conjecture or were arbitrary, as alleged in some of the objections. He seems to have weighed the evidence with care. Some of the questions submitted to him on recommittal were not susceptible of mathematically exact answers. Certainly in the absence of a full and complete report of the evidence we cannot say that the findings were not supported. Further discussion of the Department's exceptions to the master's report would serve no useful purpose. We have examined them all with care and discover nothing that vitiates the master's findings.

[6] The facts shown in the master's third report do not help the Department. The allocation of expenses between the gas business and the appliance business results in adding at most only \$75,531 to the revenue of the gas business available for interest and dividends. Only \$50,000 of the company's invested capital has been withdrawn from the service of the public in the gas business for purposes of the appliance business. This sum

BOSTON CONSOL. GAS CO. v. DEPT. OF PUB. UTIL.

can have no significant effect upon a rate base of \$45,000,000. The earnings under the Department's order are still less than they would have been under the rates filed by the company by, roughly, not less than \$325,000, and amount to approximately 1.26 per cent on a rate base of \$45,000,000. This is confiscatory. There would still be confiscation if the rate base were taken at any lesser figure which on any theory could possibly be warranted by any facts found by the master. The company had a right to try to increase its earnings at least to the

extent that would be brought about by the rates which it filed.

The Department's appeal from the interlocutory decree after rescript is dismissed. The company's appeals have become of no importance and are deemed to be waived. The interlocutory decree denying the company's motion to strike a portion of the master's report is affirmed. The interlocutory decree overruling the exceptions of both parties to the master's third report and confirming the report is affirmed. The final decree is affirmed.

So ordered.

COLORADO PUBLIC UTILITIES COMMISSION

Re Rule No. 32 Governing Common Carriers by Motor Vehicle

Case No. 5045, P.U.C. No. 2193,

Decision No. 38994

July 16, 1952

INVESTIGATION of use of "application slips" by motor carrier instead of tickets; exception to rules granted.

Rates, § 417 — Motor transportation — Employees of mining company — Waiver of ticket requirement.

A motor carrier was permitted, in lieu of providing and selling tickets for transportation of miners and others under Commission rules and regulations, to use "application slips" where it had been agreed with the mining company that miners and others would sign these slips authorizing the deduction from wages of the amount due for bus fare and its remittance to the motor carrier.

By the COMMISSION: Under date of December 18, 1950, Decision No. 35803, Emil Voehringer, Silverton, Colorado, was granted a certificate of public convenience and necessity for the transportation of minors and per-

sons, on schedule, between Silverton, Colorado, and the Idarado Mining Company, located on U. S. Highway No. 550.

Since the beginning of operations under this certificate, the carrier and

COLORADO PUBLIC UTILITIES COMMISSION

the Idarado Mining Company, agreed that in lieu of selling tickets or collecting cash fares, the miners or persons would sign the following application for Bus Transportation slips:

"Application for Bus Transportation

"The undersigned, employed by the Idarado Mining Company, hereby authorizes Idarado Mining Company to withhold from any wages or compensation due him \$7 each half month for bus fare from Silverton to Treasury Tunnel and back again each day worked.

Dated, 1952
Signature of Employee"

Thereafter these slips are forwarded to the office of the mining company, and each pay period, the amount specified on the "application slip" is deducted from the miner's wages and in turn paid to the carrier for bus service rendered.

These "application slips" do not conform to that portion of Rule No. 32 of the Commission's Rules and Regulations Governing Common Carriers by Motor Vehicle, which provides:

"Motor vehicle carriers transporting passengers are required to provide and sell tickets, at tariff rates, to cover transportation of each and all passengers carried, tickets to be taken up

and canceled by the driver or persons in charge, provided that the Commission may by order make such exception from the operation of this rule as it may consider just and reasonable."

To comply with the rules and regulations of the Commission, request has been made by the carrier for an order authorizing the use of the above "application slips" in lieu of providing and selling tickets for the transportation of minors between Silverton, Colorado, and the Idarado Mining Company property located on U. S. Highway No. 550.

After careful consideration of the facts, the Commission is of the opinion that the request is just and reasonable.

The Commission finds, that the requirements of that portion of Rule No. 32 of the Rules and Regulations Governing Common Carriers by Motor Vehicle, which requires Emil Voehringer, of Silverton, Colorado, P.U.C. No. 2193, to provide and sell tickets for the transportation of miners between Silverton, Colorado, and the Idarado Mining Company, should be waived and in lieu thereof the Commission should authorize the use of "Application for Bus Transportation" slips as more specifically shown in the statement above.



Industrial Progress

A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.



Gas Utilities Continue to Expand to Meet Demand

THE year 1952 has witnessed mounting expenditures by the gas industry to take care of the continuing demand for service, and there is every indication that the expansion program will be carried on during the next several years. This is evident throughout the country, as shown by these most recent figures on gas construction expenditures submitted by the following companies, constituting a large and representative segment of all branches of the gas industry:

Arizona Public Service Company (Phoenix, Ariz.) reports that during the six-year period 1946-1951 it has spent \$13,030,000 for the expansion of gas facilities. Expenditures for the current year will amount to \$2,183,000. It is estimated that \$9,323,000 will be spent during the years 1953-1957.

Atlanta Gas Light Company (Atlanta, Ga.) has made gross additions to gas facilities since V-J day amounting to \$19,672,000. Estimated expenditures for the current year will account for an additional \$4,589,000. It is expected that expenditures for the next five years will amount to \$21,316,000.

Brooklyn Borough Gas Company (Brooklyn, N. Y.) spent \$4,000,000 during the period September 1, 1945 through 1951. The gross additions for 1952 are estimated as \$270,000. The company contemplates spending \$1,250,000 during the next five years.

The Brooklyn Union Gas Company (Brooklyn, N. Y.) has been engaged in an extensive expansion program since V-J day, having spent \$34,677,000 in this period. Construction expenditures during 1952 are expected to amount to \$6,047,000. It is estimated that \$22,100,000 will be spent during the year 1953-1957.

Central Hudson Gas & Electric Corporation (Poughkeepsie, N. Y.) reports that it spent \$4,729,000 on expansion of gas facilities in the five years ending 1951. Expenditures will amount to \$353,000 for the current year and \$1,500,000 during the next five years.

Central Illinois Light Company (Peoria, Ill.) spent \$4,593,200 on expansion of gas facilities in the postwar period ending 1951. Expenditures for the current year will amount to \$2,760,900. The company contemplates spending \$4,000,000 during the next five years.

Central Vermont Public Service Corporation (Rutland, Vt.) estimates that it will spend \$100,000 for expansion of gas facilities during the next five years.

Cincinnati Gas & Electric Company (Cincinnati, Ohio) reports that the cost of its gas construction program from V-J day through 1951 was \$13,000,000. Expenditures for the cur-

rent year will amount to \$3,500,000. Expenditures for the next five years are estimated to be \$17,000,000.

Coast Counties Gas & Electric Company (San Francisco, Calif.) has spent \$9,285,000 on gas expansion since the end of World War II. Expenditures in 1952 will amount to \$1,888,000 and for the following five years, \$9,000,000.

Colorado Interstate Gas Company (Colorado Springs, Colo.) has had an extensive program under way, having spent \$49,563,370 since V-J day. Total gas expenditures for the current year, including subsidiary companies, will amount to \$9,650,000.

Columbia Gas System, Inc. (New York, N. Y.) reports that total expenditures for property additions for System companies during the period 1947-1951 was \$256,398,000. Estimated expenditures for 1952 are \$75,815,000.

Community Public Service Company (Fort Worth, Tex.) has spent \$556,398 for gas expansion since V-J day. Expenditures for the current year through July amount to \$17,248. Future plans call for a five-year program estimated to cost \$200,000.

Consolidated Edison Company of New York, Inc. (New York, N. Y.) reports that gas expenditures since V-J day have amounted to \$87,700,000 with \$5,700,000 having been spent during the current year. Expenditures for the next five years are expected to amount to \$25,300,000.

Consolidated Gas Electric Light & Power Company (Baltimore, Md.) has spent \$23,457,976 for expansion of gas facilities since V-J day. It is estimated that \$4,137,000 will be spent during the current year. Gas expenditures for the next five years are estimated at \$30,000,000.

Consolidated Natural Gas Company (New York, N. Y.) has been engaged in an extensive program during the last several years. From 1946-1952, inclusive, this company has spent \$253,000,000, with \$48,000,000 being expended during the current year.

Consumers Power Company (Jackson, Mich.) reports that total gas expenditures since V-J day amount to \$42,935,300. Expenditures

(Continued on Page 34)

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are estimated at \$13,000,000 for 1952 and \$44,000,000 for the four-year period 1953-1956.

Danbury & Bethel Gas & Electric Light Company (Danbury, Conn.) has made additions to its gas facilities since V-J day amounting to \$1,060,000, with \$30,000 being spent during the current year. The estimated cost of its 1953-1957 program is \$250,000.

Dayton Power & Light Company (Dayton, Ohio) has spent \$8,288,892 since V-J day for expansion of gas facilities. Total expenditures for the current year are estimated at \$1,966,741. It is expected that \$12,804,000 will be spent during the next five years.

East Ohio Gas Company (Cleveland, Ohio) reports that during the postwar period, it has spent \$67,100,000 for gas expansion, with \$8,600,000 being spent during the current year.

El Paso Natural Gas Company (El Paso, Tex.) expects to spend \$176,000,000 to build 822 miles of main transmission line in the states of Texas, New Mexico, and Arizona.

Empire Southern Gas Company (Fort Worth, Tex.) has invested \$2,050,000 in gas facilities since V-J day. A construction program of \$215,000 is being carried out during 1952. For the five-year period 1953-1957, construction is expected to total \$1,025,000.

Equitable Gas Company (Pittsburgh, Pa.) reports that expenditures since V-J day for plant improvements have amounted to \$22,000,000. Expenditures for the current year will

amount to \$4,182,000. Expenditures for the next five years are estimated at \$16,600,000.

Hartford Gas Company (Hartford, Conn.) reports that it has spent \$5,631,700 since V-J day. It estimates that it will spend \$2,800,000 during the next five years.

Hope Natural Gas Company (Clarksburg, W. Va.) plans to construct 33 miles of pipe line in West Virginia and Virginia in order to obtain new supplies of natural gas from recently developed gas producing acreage in Wyoming and McDowell counties, West Virginia, and Buchanan County, Virginia.

The proposed pipe line is estimated to cost \$1,165,080.

Indiana Gas & Water Company, Inc. (Indianapolis, Ind.) reports that during the postwar period, it has expended \$12,199,478 for construction. Total expenditures for the current year will amount to \$2,749,355. It expects to spend an additional \$8,400,000 during the next five years.

Iowa Power & Light Company (Des Moines, Iowa) has made expenditures for construction of gas facilities since the end of World War II amounting to \$3,988,954. Estimated expenditures during the current year amount to \$1,104,300. The proposed 1953-1957 construction program amounts to \$5,000,000.

Iowa Public Service Company (Sioux City, Iowa) spent \$4,700,000 for expansion of gas

(Continued on Page 36)

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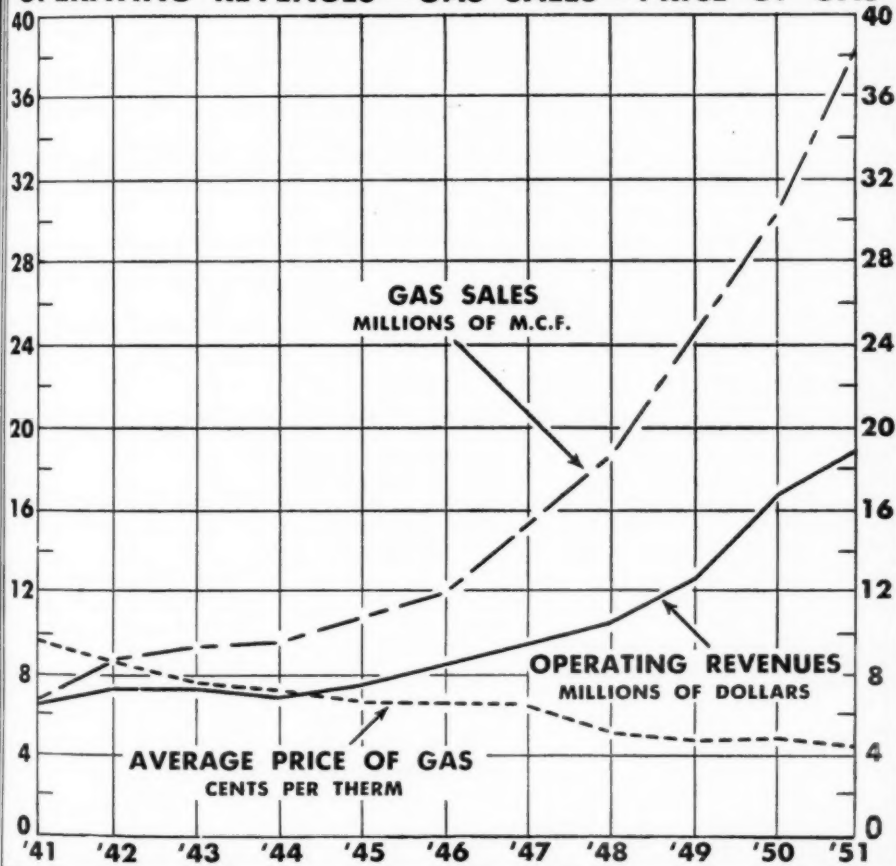
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MINNEAPOLIS GAS COMPANY

facilities from V-J day through 1951. Total expenditures for the current year will amount to \$750,000. It plans to spend \$6,000,000 during the next five years.

Kentucky-West Virginia Gas Company (Ashland, Ky.) reports that it has spent \$11,563,041 during the years following V-J day. Total expenditures for the current year will amount to \$2,379,470. Construction during the next five years is expected to cost \$12,873,150.

Laclede Gas Company (St. Louis, Mo.) is in the midst of a broad expansion program. Total expenditures in the postwar period amount to \$34,132,000. Total 1952 expenditures will amount to \$6,625,000. It is estimated that the 1953-1957 program will require expenditures of \$30,000,000.

Madison Gas and Electric Company (Madison, Wis.) has spent \$1,526,025 on its gas construction program since V-J day. The construction expenditures for 1952 will amount to \$230,854.

Michigan Consolidated Gas Company (Detroit, Mich.) is engaged in a large expansion program, having spent \$115,300,000 since the end of World War II. Expenditures for the current year will amount to \$15,000,000. It is estimated that \$60,000,000 will be spent during the years 1953-1957.

Middle South Utilities, Inc. (New York, N. Y.) reports that its system companies, the Mississippi Power & Light Company and New Orleans Public Service Inc., made capital ex-

pensitures from 1946 through 1951 amounting to \$11,400,000. Estimated expenditures for 1952 will amount to \$2,400,000. It is expected that construction from 1953 through 1957 will cost \$11,100,000.

Minneapolis Gas Company (Minneapolis, Minn.) spent \$16,359,291 for expansion of facilities during the period 1946-1951. Approximately \$5,500,000 is being spent during the current year. It is estimated that the 1953-1957 program will amount to \$20,000,000.

Mississippi River Fuel Corporation (St. Louis, Mo.) has spent over \$56,000,000 for improvements and additions since V-J day. It is expected that the 1952 program will amount to \$3,500,000.

Missouri Power & Light Company (Jefferson City, Mo.) reports that its gas expansion program has cost \$2,403,200 during the period following World War II to date. Expenditures for the current year will amount to \$709,067. Prospective gas expenditures for the next five years are estimated at \$2,500,000.

Montana-Dakota Utilities Company (Minneapolis, Minn.) has spent \$12,222,745 for gas construction since V-J day. Total 1952 expenditures will amount to \$4,500,000. Proposed program for 1953-1957 calls for expenditures of \$25,000,000.

Montana Power Company (Butte, Mont.) reports that its gas expansion program has called for an expenditure of \$10,200,000 since V-J day. Expenditures for the current year will total \$2,400,000. It is estimated that construction program for the next five years will amount to \$13,500,000.

Mountain Fuel Supply Company (Salt Lake City, Utah) has been engaged in an expansion program which has called for the expenditure of \$30,500,000 since V-J day. Expenditures for the current year are estimated at \$5,100,000. Prospective expenditures for the next five years will amount to \$28,000,000.

Nashville Gas and Heating Company (Nashville, Tenn.) reports that its postwar expansion program has amounted to \$5,333,054, with \$850,000 being spent during the current year. Proposed expenditures for 1953-1957 will amount to \$4,000,000.

Natural Gas Pipeline Company of America (Chicago, Ill.) has been engaged in an extensive construction program. Expenditures since V-J day have totaled \$196,810,816. Cost of the current year's program will be \$28,791,925. Expenditures for the next five years are estimated at \$127,557,621.

New Haven Gas Light Company (New Haven, Conn.) has spent \$4,677,000 on its expansion program in the period from V-J day through 1951. The expenditures for 1952 will amount to \$360,000.

New York and Richmond Gas Company (Staten Island, N. Y.) reports that the cost of expansion of facilities for the period 1947-1951 has been \$1,623,595. Total expenditures for 1952 will amount to \$400,000. Proposed 1953-1957 program will call for an outlay of \$1,500,000.

New York State Electric & Gas Corporation
(Continued on Page 38)

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tion (Binghamton, N. Y.) has made additions and improvements to its gas facilities since V-J day amounting to \$4,544,452. Expenditures of \$2,892,000 are being made this year. They expect to spend \$8,912,000 in the next five years.

Niagara Mohawk Power Corporation (Syracuse, N. Y.) states that gas construction expenditures from 1946-1951, inclusive, have amounted to \$18,300,000, with an additional \$6,400,000 being spent this year. Proposed expenditures for the next five years will aggregate \$39,400,000.

Northern Indiana Public Service Company (Hammond, Ind.) has expended \$25,053,000 since World War II for the improvement and enlargement of gas facilities. Total expenditures for the current year will amount to \$6,600,000. It is expected that the 1953-1957 program will account for an additional \$30,000,000.

Northern Natural Gas Company (Omaha, Neb.) has been engaged in an extensive expansion program, having spent \$156,077,364 since V-J day. Total expenditures for the current year will amount to \$31,788,000. Plans for the next five years call for an expenditure of \$222,708,000.

Northwestern Public Service Company (Huron, S. D.) is carrying on a gas construction program which has resulted in the expenditure of \$1,400,000 since V-J day. Expenditures planned for the current year total \$400,000 and for the following five years \$1,500,000.

Pacific Gas and Electric Company (San Francisco, Calif.) invested over \$170,250,000 in gas facilities in the period 1946-1951. A construction program of \$24,500,000 is being carried out in 1952. For the period 1953-1957, investment in new facilities is expected to total \$140,000,000.

Pacific Lighting Corporation (San Francisco, Calif.) has made capital expenditures amounting to \$206,370,000 since the end of World War II, with an additional \$44,000,000 estimated for the current year. The company's projected program for the following five years amounts to \$210,000,000.

Panhandle Eastern Pipe Line Company (New York, N. Y.) reports that construction expenditures from V-J day through 1951 have amounted to \$107,017,681, with an additional \$11,364,700 estimated for the current year.

The Peoples Gas Light & Coke Company (Chicago, Ill.) made additions and improvements to property requiring expenditures since the end of World War II of \$42,600,000. The estimated cost of the 1952 program is \$10,300,000, with a \$66,300,000 program proposed for the following five years.

Portland Gas & Coke Company (Portland, Ore.) has spent \$7,944,000 on new construction since World War II. Expenditures for the current year amount to \$850,000. It expects to spend \$13,240,000 during the next five years.

Providence Gas Company (Providence, R. I.) reports that during the postwar period expenditures for new construction have amounted to approximately \$9,000,000. Expenditures for 1952 and the period 1953-1957 are expected to amount to about \$1,325,000 and \$3,000,000, respectively.

Public Service Company of Colorado (Denver, Colo.) reports that gas construction expenditures have amounted to \$26,600,000 since V-J day, with \$4,700,000 being scheduled for the current year. The program will be continued in the next five-year period with a \$20,000,000 expenditure being proposed.

Public Service Electric and Gas Company (Newark, N. J.) has an extensive gas program underway. Since V-J day, expenditures have totaled \$77,049,779, with \$24,104,224 being spent during the current year. The 1953-1957 program will call for an outlay of an additional \$120,000,000.

Rochester Gas & Electric Corporation (Rochester, N. Y.) has made additions to its gas facilities in the postwar period amounting to \$15,800,000, with \$4,300,000 being spent during the current year. The estimated cost of its 1953-1957 program is \$15,000,000.

San Diego Gas & Electric Company (San Diego, Calif.) reports that total gas expenditures since World War II have amounted to \$15,136,916. A total of \$1,438,902 was spent during the first seven months of 1952. A \$11,690,000 program is proposed for the next five years.

Seattle Gas Company (Seattle, Wash.) has invested \$4,227,908 in new construction from V-J day to date. Prospective expenditures for the next five years amount to \$11,200,000.

South Carolina Electric & Gas Company (Columbia, S. C.) reports that additions and improvements to gas property since V-J day have required the expenditure of \$2,374,351. Total cost of this year's program will amount to \$534,102. For the five-year period 1953-1957, it is planned to spend \$3,473,300.

South Jersey Gas Company (Atlantic City, N. J.) reports that improvements and additions during the postwar period have amounted to \$8,792,605, with \$1,150,000 being spent during 1952. The program will be continued during the next five years with an expenditure of \$5,000,000.

Southern Indiana Gas & Electric Company (Evansville, Ind.) has been expanding its gas facilities. Its program since V-J day has cost \$2,600,000. Expenditures for the current year will total \$560,000. Proposed 1953-1957 construction will amount to \$3,500,000.

Southern Natural Gas Company (Birmingham, Ala.) is engaged in an extensive program which, over the period from the end of World War II through 1951, has required expenditures of \$72,800,000. An additional \$15,000,000 is being spent during the current year and a \$90,000,000 program is proposed during the succeeding five years.

Southern Union Gas Company (Dallas, Tex.) reports that total expenditures from V-J day through 1951 have been \$41,337,961. The 1952 construction budget amounts to \$11,097,286. It is expected that expenditures for the next five years will aggregate \$41,650,000.

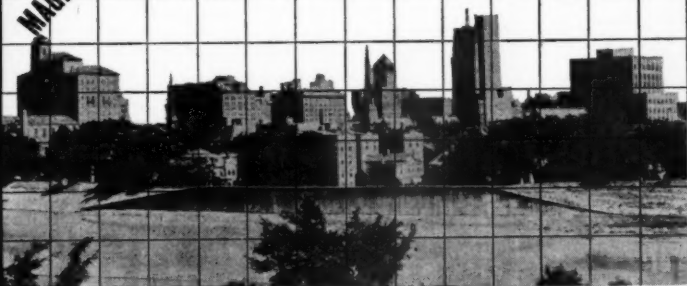
The Tampa Gas Company (Tampa, Fla.) reports that its postwar construction program has amounted to \$300,000. Total outlay for the current year will be \$30,000. Expenditures for

(Continued on Page 40)

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Tennessee Gas Transmission Company (Houston, Tex.) recently completed two pipeline jobs which have increased its daily delivery capacity to 1,350,000,000 cubic feet of natural gas daily to the Northeast. An additional expansion, which will increase daily delivery capacity to 1,515,000,000 cubic feet, and underground storage facilities to be constructed near Hebron, Pa., which will increase peak-day delivery capacity to 1,715,000,000 cubic feet, are also planned.

Texas Eastern Transmission Corporation (Shreveport, La.) has been conducting an extensive expansion program, with \$339,192,500 having been spent since the end of World War II. Total estimated capital expenditures for the current year and the following five-year period amounts to \$134,707,700 and \$17,817,600, respectively.

Texas Gas Transmission Corporation (Owensboro, Ky.) has spent \$83,500,000 since V-J day to extend and enlarge facilities. Expenditures for the current year will amount to \$36,000,000.

The Transcontinental Gas Pipe Line Company, Inc. (Houston, Tex.) is in the midst of a broad expansion program. Total expenditures since V-J day amount to \$268,917,176, with \$4,818,047 being spent during the current year.

Tucson Gas, Electric Light & Power Company (Tucson, Ariz.) reports that improvements to its gas system during the postwar period have accounted for \$2,700,000. Current year expenditures will total \$330,000. A \$2,500,000 program is proposed for the next five years.

United Gas Corporation (Shreveport, La.) expended \$193,841,000 for construction during the six year period 1946-1951. Total expenditures for the current year will amount to \$105,285,000. Expenditures of substantial sums during the next five years are expected.

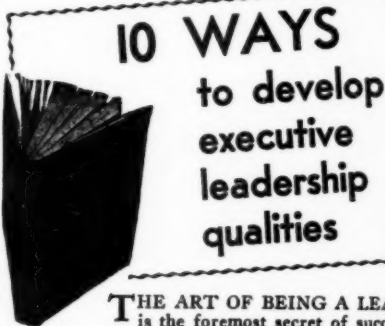
The United Gas Improvement Company (Philadelphia, Pa.) reports that capital expenditures for that company and subsidiary companies have amounted to \$27,861,532 during the postwar period through 1951. Prospective capital expenditures for the five-year period 1952-1956 amount to \$27,532,781, with \$5,474,639 being spent for the current year.

United Natural Gas Company (Oil City, Pa.) has conducted a \$19,000,000 program since V-J day, with \$4,000,000 being spent during the current year. A \$10,000,000 program is proposed for the next five years.

Washington Gas Light Company (Wash., D. C.) reports that, from V-J day through 1951, it has conducted a \$34,300,000 program. An additional \$10,400,000 is being spent during the current year. Prospective expenditures for 1953-1957 amount to \$37,000,000.

Wisconsin Power & Light Company (Madison, Wis.) spent \$1,750,000 in the postwar period for gas additions and improvements. Expenditures for the current year will amount to \$500,000. Plans underway call for an additional outlay of \$2,500,000 during the next five years.

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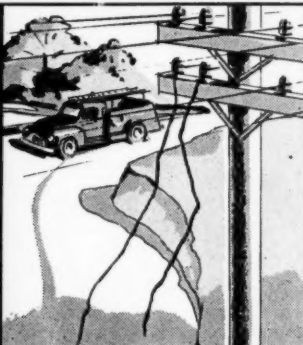
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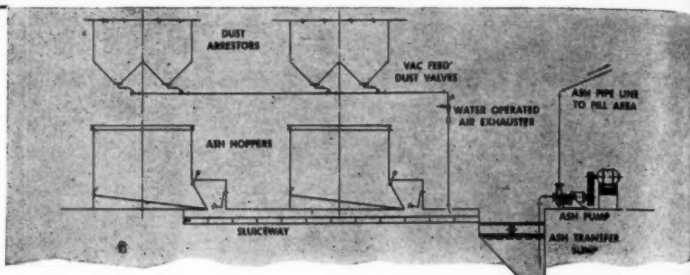
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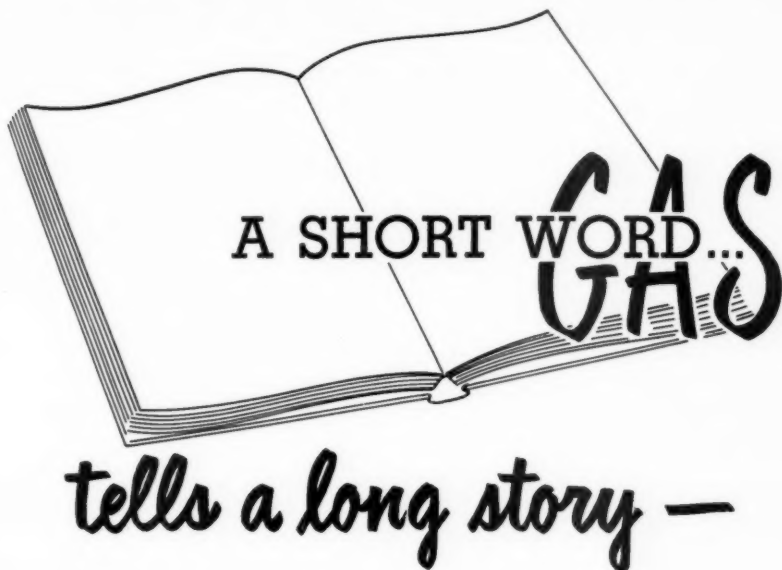
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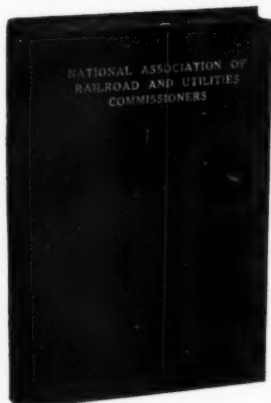
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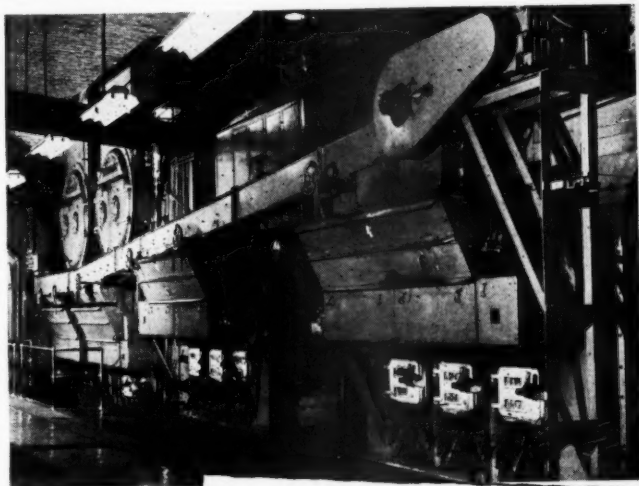
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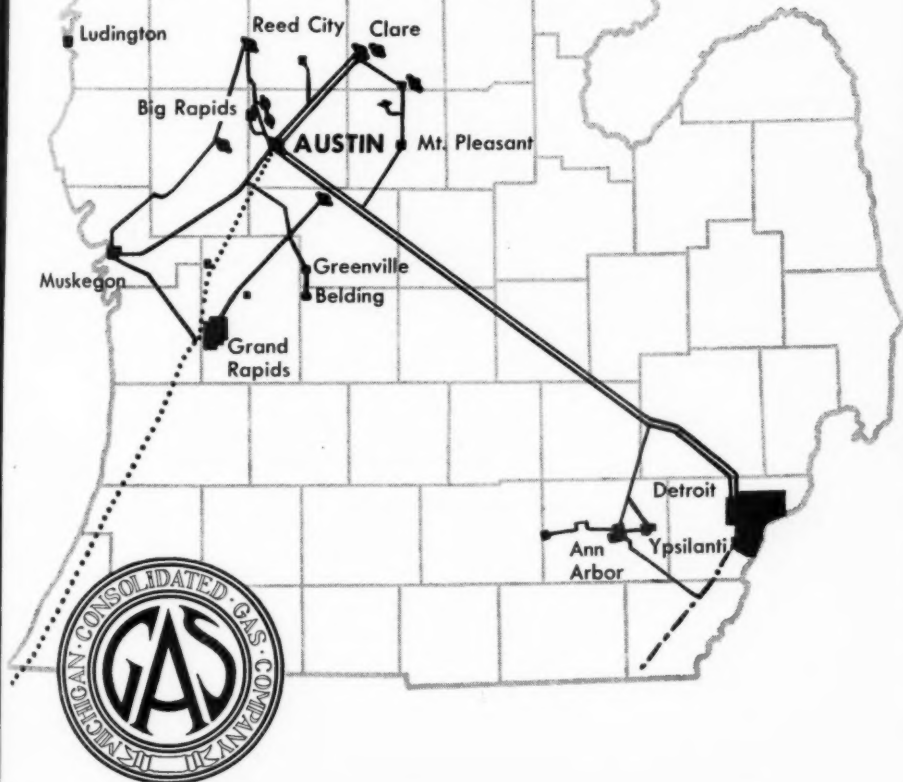


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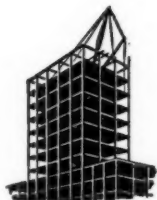
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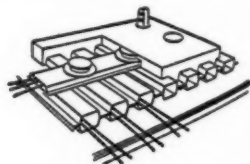


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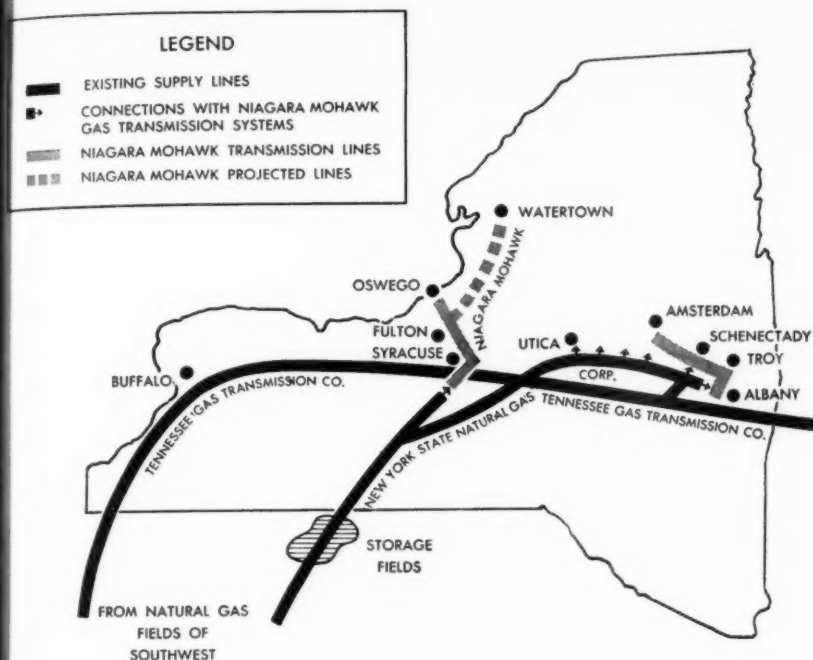
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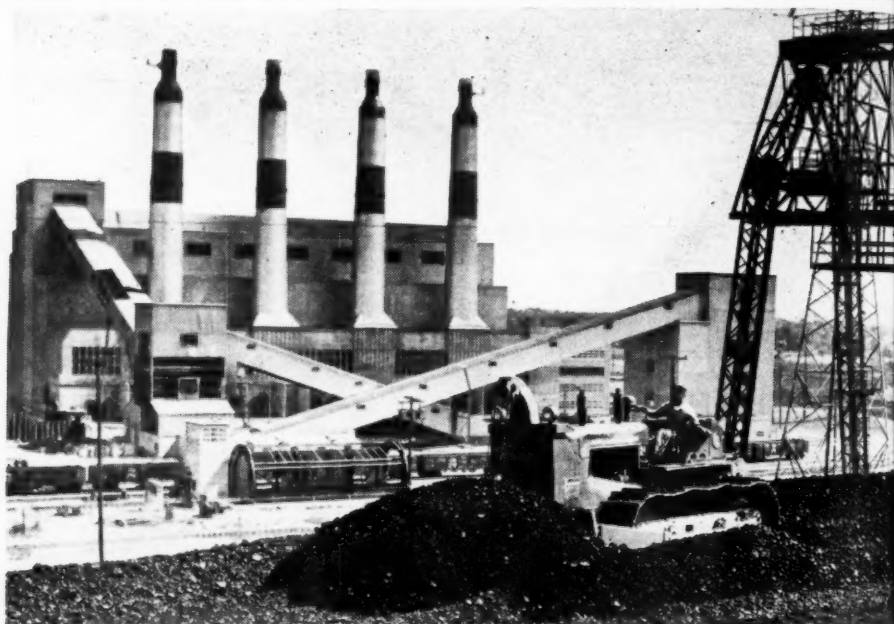
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2. **VICE PRESIDENT, OPERATIONS**, in 38-45 year age bracket. Qualified to assume full, final responsibility for operations, engineering and construction. Operating and engineering experience absolute requirement; familiarity with rate analysis, labor negotiations, analysis of manpower requirements desirable. Sufficient experience, knowledge and background to handle all operating and engineering problems of diversified utilities company. Multi-utility experience essential, such as combination electric-gas, telephone-water, etc. Eastern location.
Starting salary range (dependent on qualifications) \$12,000-\$15,000
3. **TREASURER** in 35-40 year age bracket. Qualified to supervise and administer all accounting and quasi-accounting, commercial problems. Experience in utility accounting, including familiarity with F.P.C. and F.C.C. systems, and also in utility financial budgeting and use of budgetary methods for control, essential. Knowledge of systems and methods development and rate case preparation desirable. Eastern location.
Starting salary range (dependent on qualifications) \$10,000-\$12,500
4. **GENERAL SALES MANAGER** in 35-45 year age bracket. Qualified to direct, from a central administrative office, sales and load building program for geographically separated electric, gas, and telephone properties. Experience in actual selling and in building of sales forces absolute requirement. Familiarity with technical bases for competitive selling desirable. Eastern location.
Starting salary range (dependent on qualifications) \$5,000, plus commission arrangement

Each of the above jobs is with an organization whose fundamental policy is aggressive, efficient and productive business management. General requirements are that applicants must be ambitious, hard working, and interested in a productive association, rather than in only the security of a "civil service" type position.

Successful candidates will have the philosophy that continuing personal benefit and advancement can only result from continuing achievement on behalf of the organization.

Starting salaries within the above ranges will depend upon how closely applicants meet the ideal specifications. Engagements will be premised on improvement in compensation within one year from association, if productive job is done. Pension and insurance benefits are at least competitive.

These jobs are *not* for the chronically discontent. They are for those who rebel against advancement based only on seniority or years of service. They are for those qualified in the belief that they can really achieve and want to be compensated only for their achievement. They will appeal to those whose personal development or advancement has been stymied by contrary policy. They will be for those who want the challenge—and opportunity—of responsibility.

Consideration will be given only to those submitting detailed history of personal experience and qualifications, which should include present compensation and compensation in all previous positions. Applications should also include concrete reasons for a desire to change from present affiliation. Pictures should accompany each application.

All applications for each position will be treated in complete confidence. Those really qualified will be promptly advised of interview arrangements.

In each instance, appropriate employees have been advised of these openings.

The organizations involved are growing at a rate much faster than the average for the industries. The opportunity to combine "workability" with "livability" is unusual at the proposed locations.

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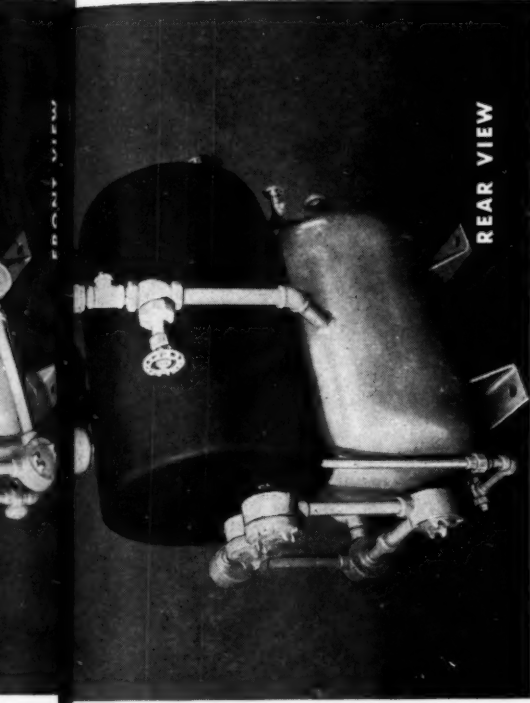
And like the larger Blaw-Knox Electroil Fogger, this improved model is a *safe, explosion-proof, shop-assembled unit, which solves many static oil fog in the gas stream...* safely, automatically and with mini-



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At A.G.A. convention-time, U.G.I. salutes "men and machines", the proper coordination of which is the secret of American free enterprise.

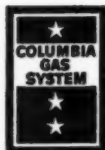
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Philadelphia, Pennsylvania

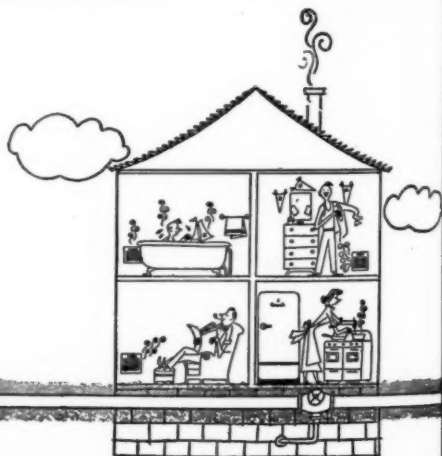


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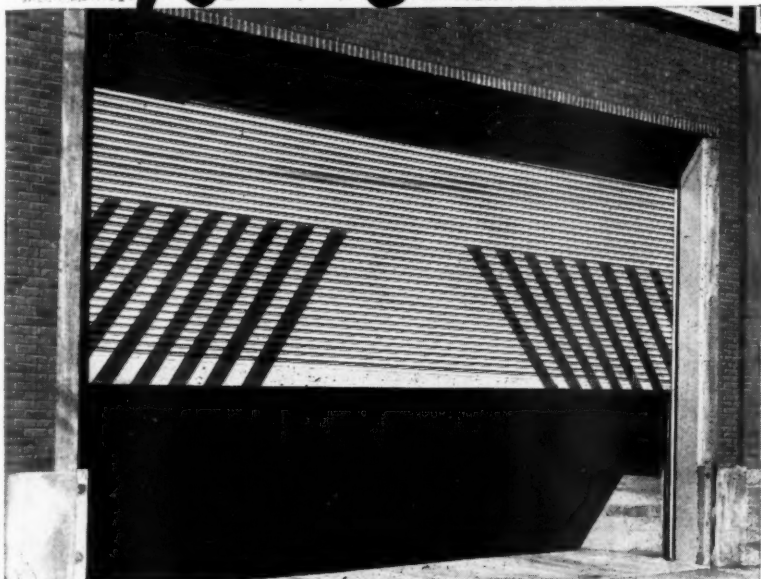


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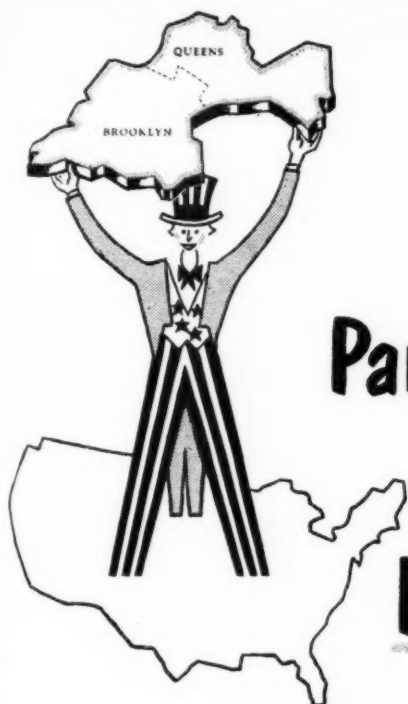
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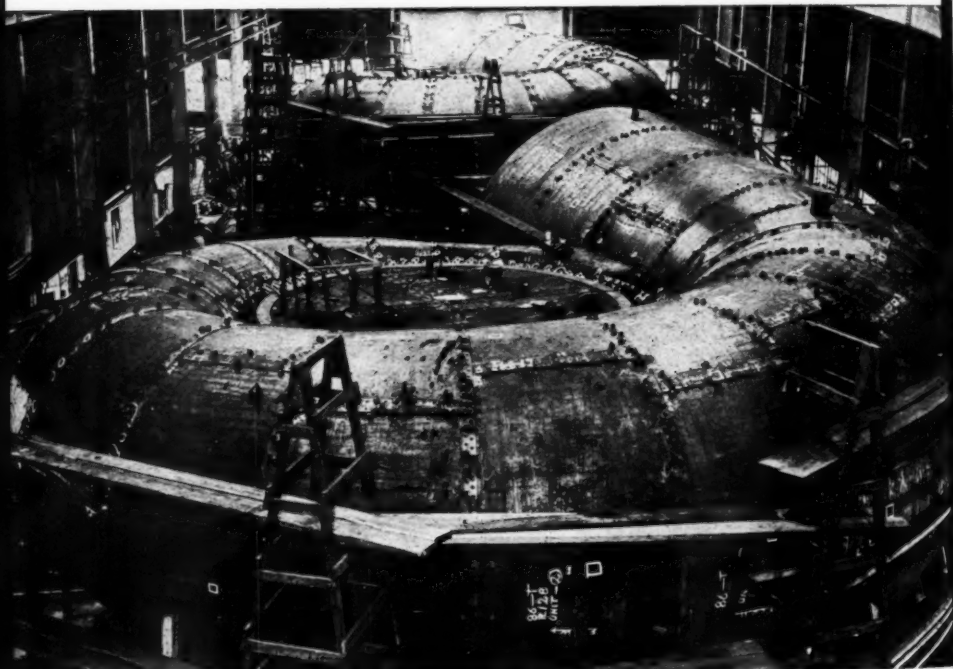
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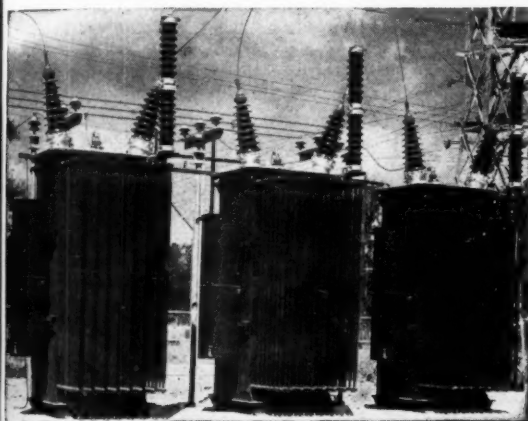
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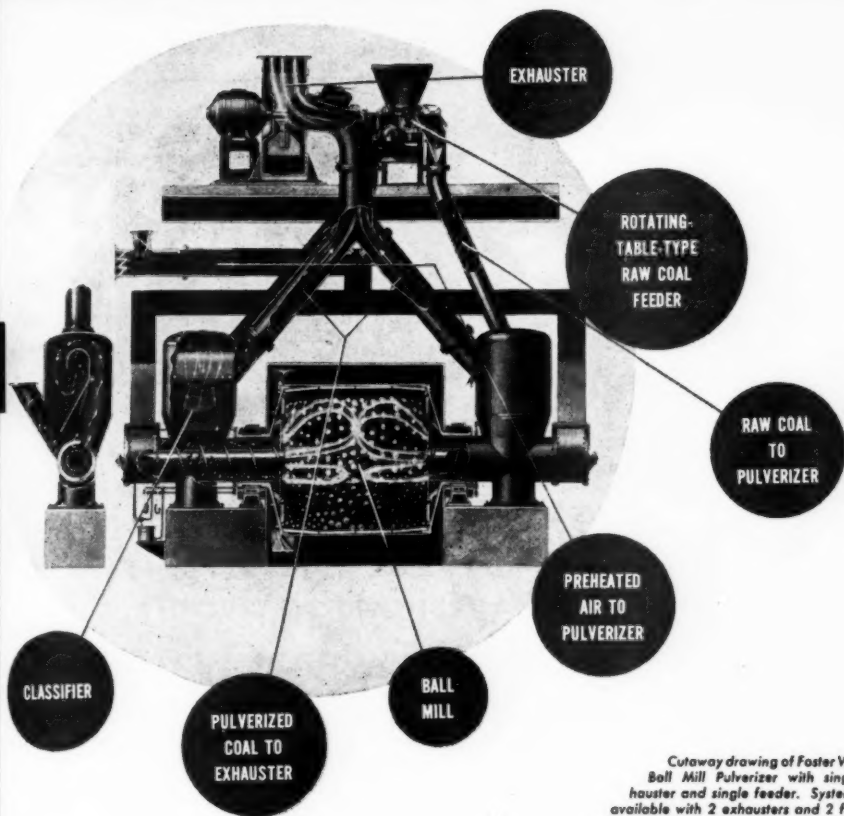


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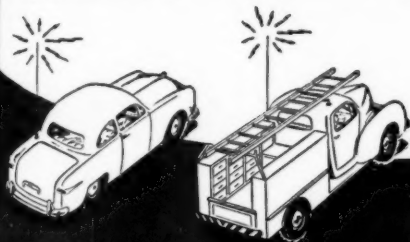


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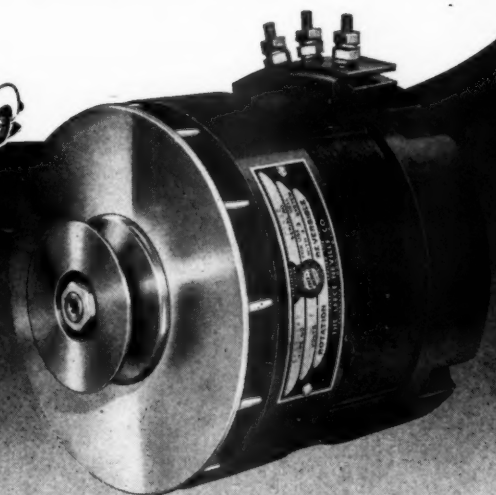
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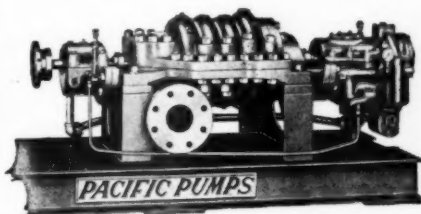
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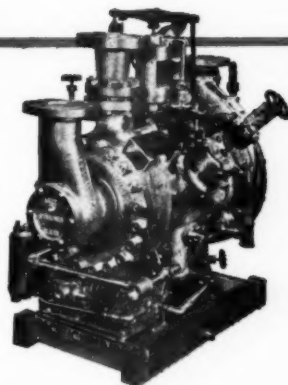
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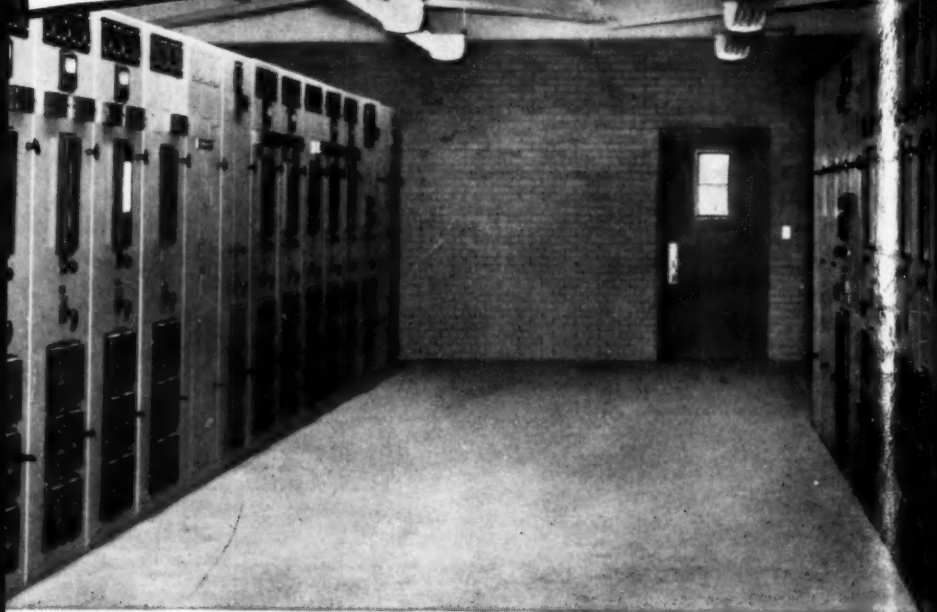
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